the magazine of STANDARDS

Company Member Conference, Philadelphia . . . page 197

JULY 1960

the magazine of STANDARDS

Standardization is dynamic, not static. It means not to stand still, but to move forward together.

Vol. 31 No. 7 JULY 1960

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Unified screw threads have become predominant in this country. This is recognized in the new edition of American Standard B1.1-1960, *which also includes much new material on screw threads.*

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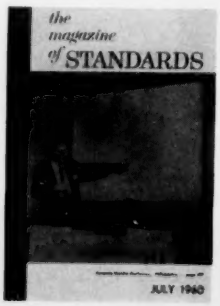
ASA

THE COVER: Discussing new standards for measurement, on which the National Bureau of Standards has been working recently, Alvin G. McNish points to the screen where some of the Bureau's equipment is illustrated. New basic standards of length and more precise gage blocks were among the most important changes Mr McNish mentioned.



notes

• Industry and the public have an important investment in American Standards. Many long hours of work, time that represents money, not to mention the direct financial investment, have gone into the nearly 2000 American Standards now available.

Shockingly enough, however, now and then a story appears in the news that indicates this huge investment has been disregarded and the standards that would have prevented loss or given more efficient service have not been used effectively.

An occasion in point is the recent collapse of a portable grandstand at a race track. Such an incident, involving as it does, loss of life, human suffering, and great money loss as well, seems to be unnecessary in view of the fact that standards for the construction of portable grandstands have been in existence for many years. They are now contained in American Standard Z20.3-1957, Places of Outdoor Assembly, Grandstands and Tents (NFPA No. 102).

ASA Project Z20 is sponsored by the Building Officials Conference of America and the National Fire Protection Association. It seems sad that a happy event could be turned into a tragedy while the result of hours of work and the expert knowledge that went into this American Standard remained between the covers of a publication on a library shelf.

• There is still time this year to take advantage of safeguards in another field. The Lightning Protection Institute expects a loss due to lightning of $120 million this year. Much of this loss can be prevented if more industries and individuals become better acquainted with the American Standards for Protection Against Lightning. These standards (C5.1-1959, C5.2-1959; and C5.3-1959—NFPA 78) offer recommendations for protection of persons; protection of buildings and miscellaneous property; and protection of structures containing flammable liquids and gases.

This Month's Standards Personality

Leo L. Beranek

photo: Fabian Bachrach

WORLD-RECOGNIZED as an authority on acoustics, Dr Leo Beranek has given his support and much of his time to research and to development of standards as a means of bringing industrial noise under control. Not only is he a member of sectional committees on acoustics, mechanical shock and vibration, and bioacoustics, but he is also chairman of ASA's Acoustical Standards Board. Dr Beranek is president of Bolt Beranek and Newman, Inc, of Cambridge, Massachusetts, a research and consulting organization working on architectural acoustics, noise and vibration control, physical and engineering acoustics, and engineering psychology. In addition to his duties with his company, Dr Beranek is a lecturer at MIT, and serves as acoustical consultant to a number of organizations, including the Port of New York Authority and some of the principal airports in Europe. In the past he has acted as consultant on acoustics for such projects as the United Nations Permanent Headquarters in New York, the Lincoln Center for the Performing Arts, and the Montreal Cultural Center.

Dr Beranek's outstanding contributions to acoustics won him the Biennial Award of the Acoustical Society of America in 1944, and in 1948 a Presidential citation from President Harry S. Truman. In 1958, he presented the 45th Thomas Hawksley lecture before the Institution of Mechanical Engineers in London. He has also lectured before the Physical Society of London, the Zurich Federal Institute of Technology, the Swiss Society of Architects and Engineers, and technical and scientific organizations in Czechoslovakia, Poland, Finland, and the USSR.

After receiving the degree of Bachelor of Arts "with distinction" from Cornell College, Iowa, in 1936, Leo Beranek continued his studies at Harvard University and received the degrees of Master of Science and Doctor of Science, in 1937 and 1940, respectively. In 1946, Cornell College conferred on him an honorary degree of Doctor of Science. From 1937 through 1946, he worked at the Electro-Acoustic and Systems Research Laboratories at Harvard, successively as research assistant, instructor, director of sound control research, and director. He was technical director of the acoustics laboratory at MIT from 1947 to 1954 and professor of acoustics from 1947 to 1959.

Dr Beranek has published a large number of technical papers and articles and is author of several books on acoustics, including *Sound Control in Airplanes* and *Acoustic Measurements.*

A Fellow of a number of technical and scientific societies, he is a past president of the Acoustical Society of America.

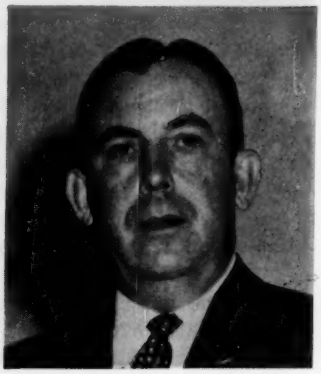
Dr Beranek is married and the father of two children. His hobbies include skiing, photography, philately, and numismatology. He holds the gold test medal for skiing and has, thereby, passed the basic tests for a Swiss ski instructor.

Admiral Hussey turns from his opening remarks on "What is the CMC?" to exchange quips with Alvin G. McNish, speaker at the first session.

The Company Member Conference

Registration tables did a rush business.

Dwight F. Hollingsworth, CMC chairman (standing), opens the Spring Meeting. The panel (left to right)—Alvin G. McNish; Scott Liston, CMC vice-chairman; H. Thomas Hallowell.



Dwight F. Hollingsworth

NEARLY 250 MEMBERS AND GUESTS who attended the Company Member Conference meeting in Philadelphia May 2 and 3 agreed that this was an outstanding event. Many of those present were attending their first CMC meeting. The largest number of exhibits ever displayed showing the work done by standards departments of ASA company members were examined with close attention. And large audiences closely followed the discussions in all sessions. Special interest was shown in the sessions on military drafting standards and on problems of a company standards engineer.

Dwight F. Hollingsworth, principal standards engineer, Engineering Department, E.I. du Pont de Nemours & Company, Wilmington, Delaware, is chairman of the Company Member Conference and was chairman of the meeting.

The members were welcomed to Philadelphia by H. Thomas Hallowell, Jr, president of the Standard Pressed Steel Company, and past president of the American Standards Association. Mr Hallowell commented that William Penn had started standardization in Philadelphia when he authorized his surveyor-general, Thomas Holme, to lay out the city in a grid-iron pattern forming four squares that are still retained in the modern city. He also pointed out that some of the work done at the Franklin Institute in Philadelphia had led to acceptance of standard screw threads.

The American Standards Association provides the rules for development of American Standards and lets those concerned battle out their differences, said Vice Admiral G. F. Hussey, Jr, managing director of ASA, in a short opening talk on "Know Your CMC." "Then we look at the results, not from a technical viewpoint but to see who may have been frozen out, who doesn't like the standards, or whether everyone has had a chance to have his day in court," Admiral Hussey explained. However, a great deal of important information would be lost if ASA spent its time only on its responsibilities in connection with development of standards. Therefore, some years ago a company member forum was set up to make it possible for company standards engineers to get together and exchange views, tell their troubles, and find out how others have solved the same problems, he said. Commenting that the exhibits were the finest ever collected on company standards activities, Admiral Hussey noted that they demonstrate that the exhibiting companies have found similar solutions to the problems of company standardization. These companies established books upon books of standards that save the time of their engineers and executives, and have indicated that one of the prime problems facing all standards men is to get across to executives what standards mean to them.

In many cases, Admiral Hussey pointed out, company executives are not aware of the services offered by the American Standards Association. One of these services, particularly important at present because of today's emphasis on exports, is a collection of all foreign standards in ASA's library. He urged that stand-

ards engineers get word to their executives and sales people that ASA exists to serve them as well as to serve the engineers themselves.

Alvin G. McNish, acting chief of the Division of Optics and Metrology, National Bureau of Standards, Washington, D. C., described new developments in precision measurement. Distance, time, mass, and temperature are the concepts underlying systems of measurement, he explained, but there must be a system of units and some physical standards in order to be able to make measurements. Today, the science of metrology has advanced to the point where more precise measurements can be made than ever before, he said, and pointed out that by October of this year it may be possible to adopt a new international standard for measurement of length in terms of the wave length of certain light waves. Improvements in standard gage blocks are now being completed, including use of a special type of steel and control of temperature during the measuring process, which makes it possible to carry out measurements to a few hundredths of a micro-inch, he said. Similarly, in the measurement of time, two similar intervals of time can now be measured and compared to within two or three parts in 10^{11}.

All these developments will give American industry better standards than ever before and standards that can be reproduced in any laboratory with the same precision that is achieved in the NBS laboratory in Washington, he said.

MOTIVATIONS for reducing item varieties was the subject of a panel discussion, of which Ray J. Abele, chief standards engineer, Burroughs Corporation, Detroit, was chairman. The consumers' viewpoint was discussed by John J. O'Farrell, Jr, project manager, standards engineering, IBM, Poughkeepsie, and by Charles W. Stockwell, chief of the Engineering Standards Section, International Harvester Company, Chicago. Reduction of item varieties by suppliers was discussed by Herman Muenschinger, chief engineer, American Screw Company, Willimantic, Connecticut. The views of the military were presented by Benjamin Rosenzweig, assistant chief for supply and analysis, Armed Forces Supply Support Center, Washington.

Mr O'Farrell believes a designer should have as his goal a profitable product and not one that is original only. In a sense, he pointed out, it is a greater challenge to solve a problem by using what is already available than to design something new. Effective standardization, particularly reduction of item varieties, must start on the drawing board in order to prevent new items from being introduced into the system rather than attempting to standardize and reduce the number of varieties after the items have reached the production stage. A standards program within a company can effect much greater standardization, doing things that cannot be done on an industry-wide basis under the anti-trust laws, Mr O'Farrell commented. He explained how the IBM Corporation makes standardization information available to designers and gave several examples of the success of these efforts. Primarily, the motivation for reducing items variety is economic, he believes.

Mr Stockwell also spoke on the consumers' viewpoint. Each variation from standard in a design makes it necessary to make the following changes, he pointed out: (a) a new drawing in the original drawing file and security file; (b) another drawing for which prints must be made in quantity for distribution through the production organization; (c) another item for the planning department to review to determine availability of tooling, processes, raw material requirements; (d) another item to release for competitive bid by Purchasing if purchased outside the company; (e) another bin or storage area in the production materials stores inventory; (f) another item to be considered for service; (g) another item for which to provide service inventory and the necessary bin or storage area to warehouse it.

Mr Stockwell described how his company has gone about item reduction. The greatest savings have been in day-by-day application of proven items at the design stage, he said. On the national and international scenes, standards for farm equipment are being developed by the Farm Equipment Institute not

Raised hands show that many of those present were attending their first CMC meeting.

Ray J. Abele (left) introduces the panel on "Motivations for Reducing Item Varieties." Members of the panel are (left to right) John J. O'Farrell, Jr; Charles W. Stockwell; Herman Muenschinger; Benjamin Rosenzweig. Henry Lamb, ASA staff, is secretary of the CMC.

only for consideration by national groups in this country but also to be submitted for consideration by the technical committee on agricultural machinery of the International Organization for Standardization.

Speaking for suppliers, Herman Muenschinger commented that there is a real incentive in some cases for suppliers to develop new products. Much of the sales effort today, he pointed out, is toward newness, convenience, style, and technological development. Particularly in the domestic market, many products are being made available with the purpose of giving the consumer a wide choice of varieties, styles, colors, models, and custom designing. In the industrial field, on the other hand, certain suppliers may urge the use of nonstandard parts in order that a single supplier may keep the business.

Mr Muenschinger showed an illustration published in 1889 covering screws patented during the period from 1831-1884. Of 38 inventions, five have survived as established company standards, and one in a modified form as American Standard. Even screws, nuts, bolts, and other fasteners call for a certain amount of evolution and change, he pointed out. However, it is important to distinguish between a fad and a really useful or serviceable product which may be the standard item of the future.

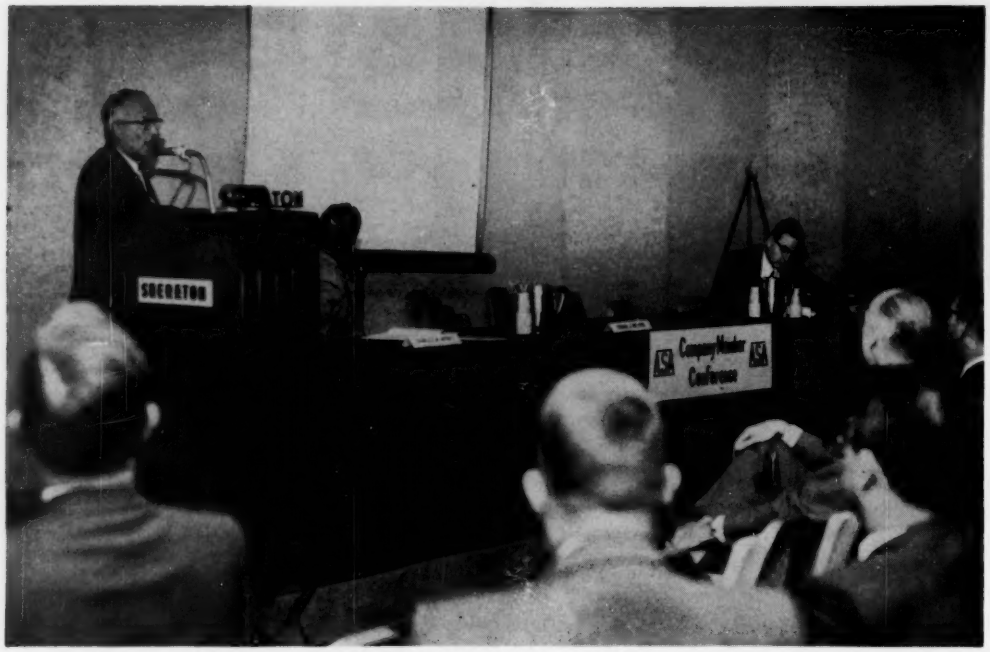
Despite the pressure for change, the American Screw Company is interested in reducing item varieties in order to reduce the production loss when a machine is shut down to change from one size or variety to another, Mr Muenschinger declared. To help solve this problem, he said, the company has adopted a system of scientific inventory control. One objective has been to eliminate many slow-moving items. As a result, a reduction of 50 percent has been made in the number of stock items. In making such reductions, however, Mr Muenschinger pointed out, it is more important to make a good estimate of future consumer needs than to base a reduction on past sales history.

Speaking on behalf of the military, Benjamin Rosenzweig, Armed Forces Supply Support Center, Washington, D. C., explained that the motivations of the Department of Defense must be different from those of civilian organizations. Military readiness, training of personnel, supply logistics, expense, as well as associated problems of engineering and design must be taken into consideration. A chief requirement of the Department of Defense is readiness for limited or full-scale action in the face of aggression. This readiness is directly affected by the responsiveness of the supply pipeline, and would undoubtedly be helped by a reduction in item varieties, he said.

In case of an emergency, the military will call upon industry to produce in vast quantities. Under such circumstances, the fewer varieties needed, the greater tonnages can be produced. The Department of Defense is also concerned with monetary savings. Any standardization effort that reduces the item varieties can result in large monetary savings to the government, since the total annual procurement amounts to billions of dollars.

WHAT the standards engineer should know about safety and fire protection was the subject discussed by Edgar J. Meyers, assistant manager, Safety and Fire Protection Division, E. I. du Pont de Nemours & Company. The du Pont program, which has developed over many years, is responsible for protecting employees from injury, protecting company property, and insuring continuity of operations. Standards are an important working tool, Mr Meyers said. Each of the du Pont plants has a set of du Pont standards which are brought up to date every two years. Some 68 standards are included in the section on safety. Mr Meyers urged company standards engineers to maintain close contact with the safety and fire prevention men in their companies. Every new company standard should be reviewed from the safety and fire protection point of view in order to check for possible dangers from flammable or toxic materials, and to determine whether protective equipment is needed for employees.

A series of slides showed how some of the safety



Edgar J. Meyers described what the standards engineer should know about safety and fire protection.

standards are used within the du Pont company; for example; the safety chute which has been used for many years as an emergency exit from powder plants, electrical standards for grounding portable equipment, standards for dispensing rooms for flammable liquids, exhaust systems for welding fumes, tank car loading platforms, and overhead guards for lift trucks.

Wherever the safety engineer is able to work with the standards engineer, it is possible to build safety into the standards as they are developed, Mr Meyers explained. In this way, safety is built into the product and equipment as they are designed.

"Industry's stake in military drafting practice" was the title of a session that brought industry and government representatives together for a discussion of mutual problems. Under the chairmanship of Charles M. Wright, the panel discussed coordination of industrial drafting practices, reasons for the military drafting requirement MIL-D-70327, and interpretation and application of MIL-D-70327, from both a military and industry viewpoint.

James A. Boxall of the Ford Motor Company, member of the Society of Automotive Engineers' Aero-Auto Drawing Standards Committee, pointed out that the SAE work had started in Subcommittee E-8 of the Aircraft Division, Aeronautics Committee, in 1941. After expanding the work to include practices that apply to all aircraft industries, the first Aeronautical Drafting Manual was completed in 1946. By 1952, it was realized that the Aeronautical Drafting Manual Committee and the Automotive Drafting Standards Committee also had common interests. By 1956 these had been combined into a joint effort within SAE.

SAE has also participated actively in the work of committees under the procedures of the American Standards Association, the American-British-Canadian Conference on the Unification of Engineering Standards, and the Ad Hoc Government-Industry Committee on Department of Defense projects.

Technical committee members actively engaged in the development of standards are convinced that industry's stake in military drafting practices is extremely important to the welfare of the nation, Mr Boxall declared. They also contend that existing industry drafting standards, such as those established by the SAE, should be given maximum recognition and use by the military. Mr Boxall recommended a free exchange of ideas on drafting practices among military personnel, representatives from technical societies, and representatives from trade associations, similar to the procedure followed by the Ad Hoc Government-Industry Committee on Department of Defense Project MIL-D-70327, Military Specification Drawings, Engineering and Associated Lists; or the Proposed Military Specification, "Microfilming of Engineering Documents, 35mm, Requirements for." This would result in a military drafting practice from which both government and industry would profit, in the opinion of the industry technical committee members.

In his paper on the reasons for the Military Drafting Requirement MIL-D-70327, C. L. Miller, Armed Forces Supply Support Center, Washington, declared that this nation can no longer afford to develop and produce goods, both military and civilian, according to differing standards for basic engineering practices. Weapons and equipment are now so complex that the

components of different manufacturers must be designed into them. The annual expenditure for engineering drawings needed for the country's defense approximates 1.5 billion dollars, he pointed out, and the Department of Defense manages 50 million drawings. New and revised drawings are being added to the files at the rate of approximately six million annually.

The Defense Department's standard, Drawings, Engineering, and Associated Lists, MIL-D-70327, takes the place of different procurement specifications for engineering drawings prepared by the Army, Navy, and Air Force, independently of each other. This integrated document was developed under the Navy Department's supervision, on recommendation of the Electronic Industries Association. EIA indicated that such a change for the procurement of engineering drawings in the electronic industry alone would save the Government more than 300 million dollars a year. MIL-D-70327 is now mandatory for use by the military departments in connection with all production contracts and all research and development contracts that result in a design released for production.

The Government is now preparing a film as a visual aid to help in promoting the use of the standard.

In addition, projects have been set up to unify military requirements for microfilming of drawings and associated lists, for rapid transmission of engineering data, for a uniform method for approval of nonstandard parts, a unified drawing control system, a uniform technical manual series, standard format materials lists (MIL-STD-30) which have machine compatibility, adequate minimum storage and protection of drawings, and uniform order of precedence for design selection.

By developing uniform standards and applying them throughout the military effort, there will be vast savings of both time and money, Mr Miller pointed out.

MIL-D-70327 represents a sincere attempt on the part of both military and industry to understand each other, Chester A. Nazian, Frankford Arsenal, Philadelphia, commented. Mr Nazian spoke on the military viewpoint under the title "Interpretation and Application of MIL-D-70327." The standard defines the types of drawings, provides for Class 1 and Class 2 drawings, and requires that the military procure only the minimum amount of information on the drawing that is actually needed. It requires all documents referenced on the drawing to be submitted with the drawing, and it requires contractors to make sure that subcontractors and vendors also comply with its provisions.

Industry, as well as the military, has responsibility for the success of this program, Mr Nazian declared. Although the document is by no means perfect, he commented, it has already provided benefits for both industry and the military in understanding each other's problems.

W. W. Thomas, Radio Corporation of America, Electronic Products Division, representing the American Ordnance Association, presented the industry viewpoint. Although both the military and industry participated in the development of MIL-D-70327, this does not necessarily represent unanimous approval, he pointed out. The military, of course, had the last word as to what would be included. Because the participation of industry in the development of this standard helped to provide an exchange of ideas between electronic, aircraft, automotive, and other industries, everybody has gained, Mr Thomas pointed out.

However, he believes, the present standard is a mixture of administrative practices with drawing details, part number assignments, and other material, which leads to complications. Also, this standard requires data from vendors which is not ordinarily required by industry in repetitive procurement. He was concerned lest a lack of judgment in the application of the standard at the local inspection level might lead to various interpretations.

Mr Thomas urged company standards engineers

The panel on "Industry's Stake in Military Drafting Practice." Charles W. Wright (left) was chairman. Panel members are (left to right) James A. Boxall; Chester A. Nazian; C. L. Miller; W. W. Thomas; C. E. Hilton.

to alert their management and sales departments so they would know about the standard in their contract dealings with the military. He suggested that each company study the provisions for options in order that their contracts will take advantage of options advantageous to them and so that all contracts will read the same.

Speaking on the status of the proposed Y14 industry panel on military standards, C. E. Hilton, secretary of the ASA Graphic Standards Board, pointed out that the military had participated actively in the work of the Y14 committee on the Drafting Standards Manual, as well as in its subcommittees, its executive committee, and on the Graphic Standards Board. The Y14 standards are engineering standards only, however, whereas MIL-D-70327 includes both engineering standards and procedural standards.

Last year the Y14 committee set up an ad hoc committee to study the relationship of its work with the military activities. This committee had recommended organization of an active industry group to be called "ASA Y14 Panel on Military Standards." The objectives of the panel were defined as "to provide a central agency for developing coordinated industry recommendations on proposed and current military standards relating to drafting practices and documentation control systems, basing such recommendations on Y14 drafting standards and standards or existing industrial practices of technical societies and trade associations represented on the industrial panel, in order to obtain maximum compatibility between industry and military practices."

The committee suggested that such a panel would have the advantage of presenting a unified opinion

Colonel E. T. Wiley, Jr, (left) chief of the Standardization Division, Armed Forces Supply Support Center, answered a number of questions about the relations of industry with the military on drafting standards. BELOW: An intent audience listened with close interest to the discussions on the problems of coordinating industrial and military drafting practices and the use of MIL-D-70327.

The panel and workshops on "The Problems of the Company Standards Engineer" wound up the sessions. Here, Mr Hollingsworth closes the meeting. The panel (left to right)—R. L. M. Rice; Edward S. Geary; Philip H. Goeltz; Ernest E. Mohr; Henry Lamb, ASA staff.

from industry rather than diverse suggestions from single industrial groups. It was believed that this might help the Department of Defense Standardization Division by providing a single group with which they could deal rather than having to work with a large variety of individual industries. This panel could refer detailed problems to individual ASA sectional committees or subcommittees for technical information as needed, and the panel would provide an additional channel for keeping industry advised of military developments. This proposal had been approved by the sponsors of the Y14 project and had been submitted to the military, but no reply has been received from the Department of Defense.

PROBLEMS of the company standards engineer was the subject of the Tuesday morning session and the workshops that followed. Subjects discussed included starting a standards program, standards manuals—format, printing, distribution, revisions, shop practices—and standards promotion and program evaluation. The session was under the chairmanship of Philip J. Callan, director of material standards, Kodak Park Works, Eastman Kodak Company, Rochester, N.Y. Using charts, Ernest E. Mohr, chemical engineering consultant, Engineering Division, Kodak Park Works, Eastman Kodak Company, presented an analysis of how to start a standards program. Philip H. Goeltz, chief standards engineer, Gleason Works, Rochester, N.Y., discussed standards manuals. Edward S. Geary, senior engineer, Western Electric Company, Kearny, N.J., presented his ideas on standardization of shop practices. Richard L. M. Rice, standards engineer, Engineering Department, E. I. du Pont de Nemours & Company, Inc, Wilmington, Delaware, spoke on the problem of standards promotion and program evaluation. The meeting then broke up into four concurrent workshop sessions, one on each of these topics.

(Papers based on the material presented at this session are being published in THE MAGAZINE OF STANDARDS, in succeeding issues. Mr Callan's introduction to the series starts on page 207 in this issue.)

The CMC meeting ended with field trips to the Philadelphia Mint followed by a tour of the Franklin Institute; a tour of the du Pont Paint Plant in Philadelphia, and a tour of the du Pont Paint Laboratory, also in Philadelphia.

The 1961 Spring Meeting is scheduled to be held in Chicago.

Chairmen of the committees which made the Philadelphia meeting so successful were Rutherford H. Fenn, Program Committee; Clifford W. Straitor, Exhibits; H. J. Baylis, Registration; R. L. M. Rice, Promotion and Local Arrangements.

Unusually interesting exhibits were shown by 21 company members of ASA (see next page for pictures of part of the exhibit area.) Companies that exhibited were: American Machine and Foundry Co; Atlantic Refining Co; Bausch & Lomb; Bell Telephone Laboratories, Inc; Burroughs Corp; Deere & Co; Department of Defense; Detroit Edison Co; Diamond Alkali Co; E. I. du Pont de Nemours & Co; Eastman Kodak Co; General Motors Corp; Gleason Works; Harris Seybold Co; International Harvester Co; W. L. Maxson Corp; Pitney-Bowes, Inc; Radio Corporation of America; Rochester Gas & Electric Corp; Standard Oil of Ohio; Taylor Instrument Co.

At the
NATIONAL CONFERENCE on STANDARDS
Sheraton-McAlpin Hotel New York City
October 25-27, 1960

The Company Member Conference has under way preliminary plans to sponsor three sessions. All interested in company standards will want to attend. Be present, too, at the annual meeting session when officers for 1961 will be installed.

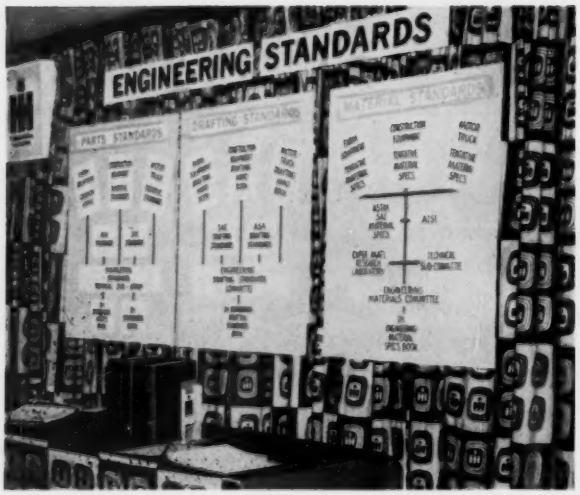
CMC members and guests studied exhibits of 21 companies with great interest. Detroit Edison features the "MO" (method of operation) of standards.

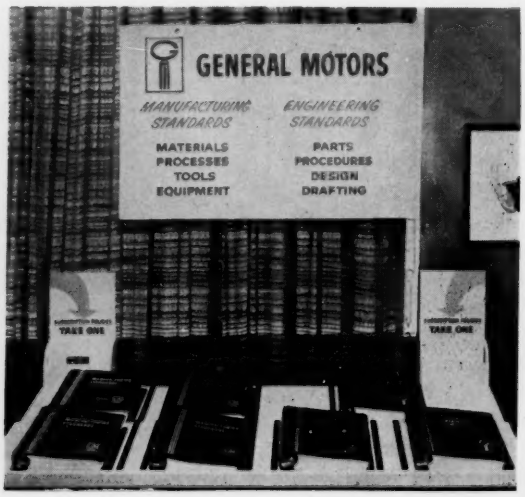
Companies Exhibit Standards

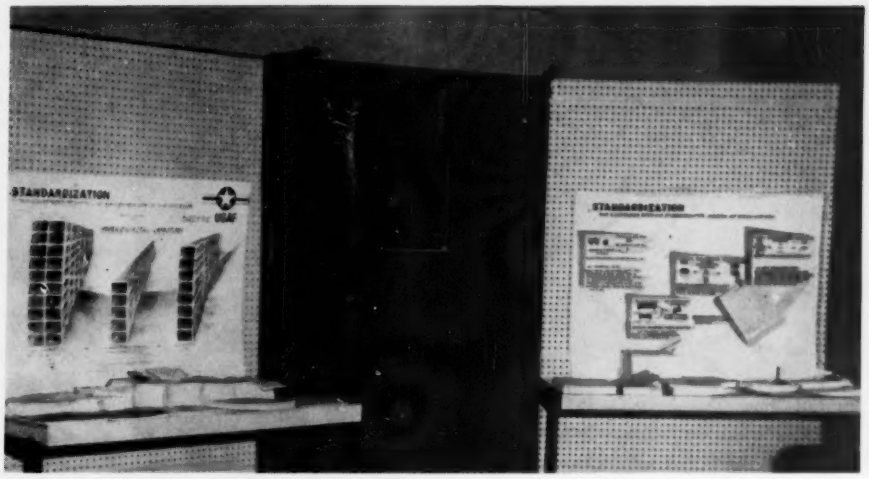
LEFT: The science of precision measurement was the Bausch & Lomb theme. Exhibit showed how an Optical Flat Reference glass produces dark bands (fringes) which are used in specifying power tolerance in optical glasses to assure accuracy.

BELOW, LEFT: International Harvester showed that standards of national organizations contribute to its Engineering Standards. Farm equipment, construction equipment, and motor trucks are covered under the three main headings: Parts Standards, Drafting Standards, and Material Standards. These are available in the IH Standards Books.

BELOW: General Motors issues Manufacturing Standards and Engineering Standards, the Manufacturing Standards covering materials, processes, tools, and equipment; the Engineering Standards covering parts, procedures, design, and drafting.





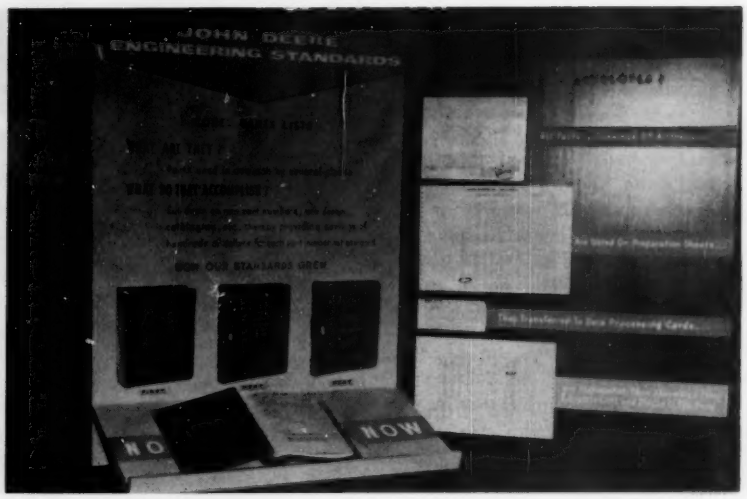


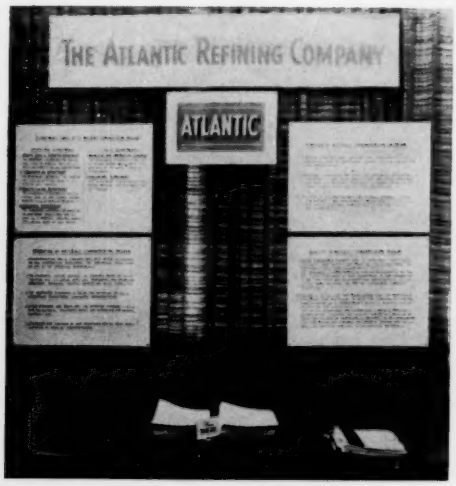
The U.S. Air Force illustrated how a change in a specification reduced the number of storage bins needed for paper-dielectric capacitors (left); how Air Force uses MIL specs to standardize resistors (right).

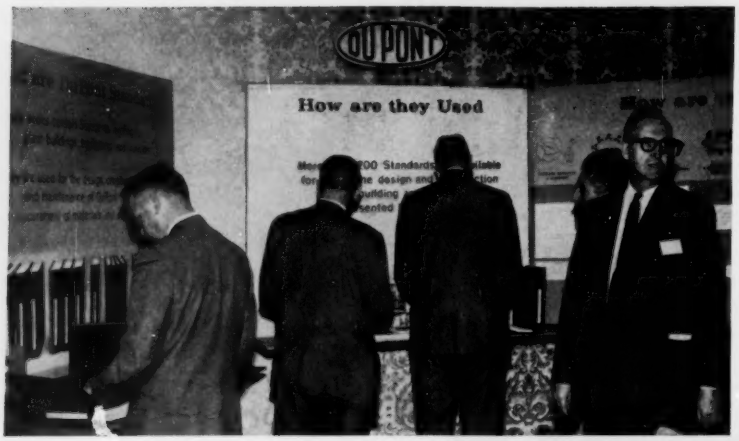
RIGHT: The John Deere exhibit. Coded parts are used in common by several plants. They cut down on new part numbers, new design, cataloging, and other costly operations, saving hundreds of dollars. The exhibit showed how the company's standards grew and how they are developed.

BELOW: Atlantic Refining's exhibit listed the departments served by the materials standardization program, showed how the program operates, its function, and the benefits derived.

BELOW, RIGHT: The Gleason Works displayed standard parts. Ribbons point to documents in which parts are standardized and their location in machines.







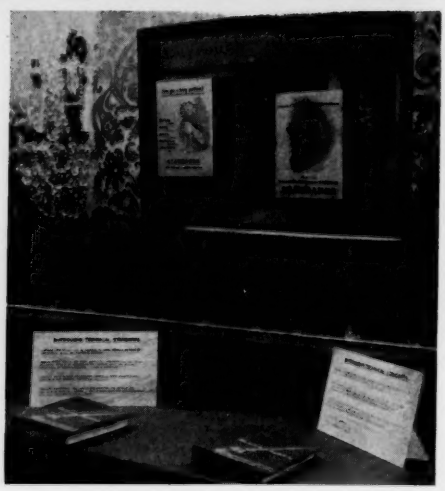
LEFT: A model of a building and its equipment in the Du Pont exhibit drew admiring attention. More than 200 standards apply in its design and construction, Du Pont explained. Du Pont's books contain standards relating to plant, buildings, equipment, and supplies. They are used for design, construction, maintenance, and procurement. Panel on right describes how standards are developed.

BELOW: RCA's many books of standards include electronic components, purchasing, finishes, phonograph records, drawing, general standards, and a book of American Standards.

Bell System standards cover engineering design data, drafting, Bell System practices, and telephone manufacturing projects; also design, drafting, and manufacturing standards for the military projects on which the Bell Telephone Laboratories and the Western Electric Company work.

BELOW: Philip Callan calls attention to Eastman Kodak's engineering and material standards, which cover product design, raw materials, plan construction, machine design, engineering materials, equipment design, maintenance and supply items.

BELOW RIGHT: Have you a hairy problem? asks the Burroughs Corporation, and suggests that standards may provide a smooth solution to specifying a process, deciding on a part, selecting a material, in manufacturing, and in communication ideas.



HELP WANTED

by PHILIP J. CALLAN

Director of Material Standards, Kodak Park Works, Eastman Kodak Company, Rochester, N.Y.; member of the Administrative Committee, ASA Company Member Conference

Philip Callan speaking at the CMC meeting.

This is an introduction to a series of articles on company standards, based on papers presented at the Spring Meeting of the ASA Company Member Conference in Philadelphia, May 2 and 3, 1960. Mr Callan was chairman of the session on Problems of the Company Standards Engineer. The series will take up specific phases of a company standards program and experiences of companies in the use of standards. The first of the series, by Ernest E. Mohr, to be published in the August issue, will discuss the problems of starting a company standards program.

THIS INVISIBLE SIGN hangs over the desk of every standards engineer, and is stamped on the face of every standard that he issues.

This same invisible appeal will provide the backdrop for the series of articles on the "Problem of the Company Standards Engineer," which will follow in succeeding issues of this magazine. The standards engineer cannot solve all his problems himself—he needs help.

In 1956 the Seventh National Conference on Standards had as its theme, "Standards are Everybody's Business." It is no less true that the problems of the company standards engineer are "everybody's business." Most of his problems are caused by "everybody," and to solve them he needs "everybody's help."

The problems of the standards engineer are surely no more numerous than those in other fields of industrial activity. However, most of them are of a particularly frustrating nature—and they begin to develop as soon as he undertakes his job.

In this series of articles the company standards engineer is assumed to be the supervisory head of a standards section, department, division, or whatever the unit may be called, depending upon its size and location in the organization. This unit may have developed just naturally from the bottom up, attaining growth and stature as its contributions and value to the company have been recognized; or it may have been set up by some level of management, with instructions to operate according to certain procedures.

When the standards engineer has taken over responsibility for this unit, after a short study of his assignment he is easily convinced of the substantial savings in time and expense, and the improvement in quality that can be made through standards, and he digs in with enthusiasm. He soon finds, however, that despite the demonstrable advantages, his standardization program is not immediately acceptable. He finds too that it cannot be effectively imposed even by management directive. It will only be effective in proportion to the number of people who are convinced of its merits and who are willing to cooperate in its application. Thus, the solution to the standards engineer's problems as a whole needs the help of everybody.

Who is everybody, and what are everybody's responsibilities? This question is most easily answered by dividing "everybody" into a number of typical groups and considering each as a unit. First, we have the standards engineers themselves, then those engineers who are, respectively, in engineering design, materials selection, and quality control, inventory control, purchasing, manufacturing, accounting, and management itself.

Beginning at home, the standards engineer and his group should attack first all the problems that do not require help from others. As he proceeds, he will find it necessary to work with other groups in the organization. He should conduct his operations openly, fairly, and with patience, to gain the respect of those in other departments with whom he works and of those from whom he seeks assistance. At the same time, he should make an intensive effort to understand their aims, functions, and responsibilities because it is only through mutual understanding that standards will be accepted and the inherent savings realized.

Design engineers should interest themselves in the principles of standardization so that they can appreciate the effect that standards, or lack of standards, have on all of the operations between the drafting board and the sale of the final product. Such an understanding is necessary to differentiate between the

desirability of incorporating an existing standard into a new design, or the alternative of developing something entirely new. They should develop a responsibility for feedback to the standards unit when an existing standard is found to be in need of revision or replacement.

Those responsible for the selection of materials, and for the control of their quality, must be willing to set realistic limits on the lowest level of quality which, if met consistently, will yield the desired quality of a product. Those who demand that high limits be written into specifications and standards, and then consistently accept lower limits (exception to the standards) in everyday operations undermine the standards program and cause unnecessary expense in purchasing, testing, and manufacture.

STANDARDIZATION plays such an important role in optimum inventory control that the closest relations should exist between the manager of stores and inventory and the standards engineer. Capital tied up in inventory can be substantially reduced by eliminating unnecessary varieties of items, and by reducing losses due to obsolescence. In addition, good standards drawn up around commercially available materials reduce the size of safety stocks through shortened lead times in procurement. Labor and clerical operations are reduced for the same reasons, as well as through improved and standardized nomenclature and numerical identification. Many of the problems of the standards engineer are of equal concern to those in inventory control.

Purchasing has traditionally exhibited a keen interest in standardization problems. Good standards and specifications provide a bridge between the responsibilities of the buyer and those of the design engineer. They enable the buyer to purchase material of acceptable quality without sacrificing the advantages of maximum competition. The buyer is in an exceptionally good position to call attention to changes and trends in the materials picture to which the standards engineer should be alerted.

Many of the decisions made in engineering standards, and in the selection of standard parts and materials, impinge directly on machine time and shop labor costs. Supervision and staff engineers in this area, through their specialized know-how, can make substantial contributions to the standards program. The standards engineer will welcome their willing and active participation in the standardization procedure, beginning with the earliest stages.

Standards committees representing all of the above directly interested groups have a particular responsibility in aiding the standards engineer in solving his problems. In fact, if he could solve them alone he would not need the assistance of committees. It is incumbent upon each member to represent his interests adequately and to present his case clearly, but to be equally ready to understand and to appreciate other and perhaps opposing interests. It is only in this way that an optimum compromise can be reached.

Accountants have a somewhat different role to play in this business. They can help the standards engineer by refraining from piling accounting problems on top of those inherent in the standardization process itself. The benefits of standardization are so distributed throughout the entire company that it is generally conceded that it is impossible to calculate their actual total value. If certain operations can be evaluated on a tangible basis, and it can be done with the approval of the standards engineer but without taking any substantial portion of his time, such an approach might be feasible. However, any attempt to justify the over-all standards program by rigid accounting methods will raise problems which have not yet been solved.

The active assistance and cooperation of all these groups is necessary for a company to realize full benefits from its standardization program. This perhaps puts into more concrete terms the original premise that the standards engineer needs everybody's help. It is against this background that the articles to follow on the "Problems of the Company Standards Engineer," while having particular appeal to standards engineers, should deserve the attention of others as well.

A large and interested audience hears Richard L. M. Rice discuss how to promote standards and how to evaluate a standards program. Mr Rice used slides to illustrate his points.

SCREW THREADS - 1960

by FRANK P. TISCH

MR TISCH is materials and processes engineer, Voi-Shan Manufacturing Company, a Division of Voi-Shan Industries, Inc. He has been chairman of ASA Sectional Committee B1, Standardization and Unification of Screw Threads, since 1951.

AFTER A TEN-YEAR transition period during which American Standard B1.1-1949, Unified and American Screw Threads, has been in use, Unified threads[1] have now become predominant in the United States due to their more rational tolerancing system. This fact is recognized in the new edition, American Standard B1.1-1960, Unified Screw Threads, the first revision of the standard since approval of the 1949 edition. The American National screw threads have been separated from the Unified screw threads in the body of the standard, but they are included in the document as an appendix.

[1] Unified threads are those agreed upon at ABC (American-British Canadian) conferences for use in all three countries as a means of bringing about interchangeability. They were included with American (National) threads in American Standard B1.1-1949 for the first time. The scope of agreement has expanded with the number of conferences.

The new edition includes a great deal of new material. For example, an additional constant-pitch series, recently incorporated in the Unified screw thread series, is added in American Standard B1.1-1960. This series was included in a proposal considered at the 1958 meeting of Technical Committee 1 on screw threads of the International Organization for Standardization. The proposal was that the Unified screw threads, including this additional constant-pitch series, be adopted as a world standard for inch threads on the same level as the ISO standard for metric threads. As indicated above, the additional constant-pitch series proposed for the ISO standard has been incorporated in the Unified screw thread standard series and is now published in American Standard B1.1-1960.

Table 1 of the new standard includes the Unified standard series of diameter-pitch combinations and their symbols. The diameters applied to various pitches are divided into primary and secondary sizes. This is intended to simplify the selection of diameter-pitch combinations.

Limits of size for Classes 3A and 3B, both for the numbered sizes and for the standard series threads where not previously shown, have been added for the convenience of those using these thread classes.

Internal thread minor diameter tolerances of Classes 1B and 2B threads in sizes ¼ inch and larger have been increased slightly to encompass additional tap drill sizes and tolerances for cutting oversize. This should do much to eliminate the need for special drill sizes or additional operations to meet the specified minor diameters. The increased maximum minor diameters resulted from extensive research and tests to determine their suitability. At this time, the revised minor diameter limits are American Standard and have been submitted for consideration as Unified standard.

With the wide application of Unified threads, both here and abroad, the need for clarification of the 1949 standard became apparent. As experience in the application of Unified threads increased in this country, efforts towards clarification for use on drawings and procurement documents culminated in the designations shown in American Standard B1.1-1960. For example, the standard method of designating a screw thread is by specifying in sequence the nominal size, number of threads per inch, thread series symbol, and thread class symbol, supplemented optionally by pitch diameter and its tolerance or pitch-diameter limits of size.

In this new edition, additional designations have been included for threads having modifications, such as in truncation of the major diameter of external threads or minor diameter of internal threads. These modifications do not affect the use of standard series thread gages. Designations have also been added for coated threads and for standard series threads with increased length of engagement showing the required specification. These additional designations are now American Standard and have been submitted for consideration as Unified standard.

A section on acceptability of screw threads has been added in American Standard B1.1-1960 to provide a basis for common understanding between supplier and user regarding acceptable gaging practice. Acceptability of Classes 1A, 2A, 1B, 2B, and 3B is based on use of limit gages, while acceptability of Class 3A is based on use of element gaging at the minimum material condition unless otherwise specified on the drawing or procurement document.

Agreement to this procedure for acceptance of screw threads was reached after considerable discussion. While it was noted that the standard implied that all thread elements should be within the tolerance and within specified limits of size, the interrelation of the pitch diameter, variations in lead and flank angle, etc, together with practical considerations relating to established production processes, product application, and inspection procedures, resulted in the custom of basing acceptance at the minimum material limit on threaded plug and ring gaging for various mass-produced bolts, nuts, screws, and other similar fasteners, and some custom-threaded parts where design requirements are fulfilled.

Briefly, American Standard B1.1-1960 comprises diameter-pitch combinations for the Coarse Series, UNC; Fine Series, UNF; Extra Fine Series, UNEF; Constant Pitch Series, UN, including the 4-thread, 6-thread, 8-thread, 12-thread, 16-thread, 20-thread, 28-thread, and 32-thread series, and other selected combinations. It also includes tolerance classes for external threads 1A, 2A, 3A, and 3; and internal threads 1B, 2B, 3B, 2, and 3.

In addition to the standard itself, the document includes ten appendixes. These provide formulas for establishing the tolerances and limits of size of Unified screw threads as well as the complete specifications of American National screw threads.

American Standard B1.1-1960, Unified Screw Threads, brings to American industry the results of the latest agreements and reflects the best practices in the application, specification, and acceptance of Unified screw threads.

It is the result of cooperation over the years on the part of many organizations, including The American Society of Mechanical Engineers and the Society of Automotive Engineers, sponsors of Sectional Committee B1; the members of Committee B1 itself; the National Bureau of Standards; the former National Screw Thread Commission; the Interdepartmental Screw Thread Committee; the British Standards Institution; the Canadian Standards Association; and the American Standards Association.

Copies of the standard, which has been published by The American Society of Mechanical Engineers, can be obtained from ASA at $5.00.

This is the thirty-second installment in the current series of rulings as to whether unusual industrial injury cases are to be counted as "work injuries" under the provisions of American Standard Method of Recording and Measuring Work Injury Experience, Z16.1-1954 (Reaffirmed 1959). The numbers in parentheses refer to those paragraphs in the standard to which the cases most closely apply. Decisions on unusual industrial injury cases are issued periodically by the Z16 Committee on Interpretations.

Sectional Committee Z16 is sponsored by the National Safety Council and the Accident Prevention Department of the Association of Casualty and Surety Companies.

INDEX TO CASES 400-700. An index to Cases 400-700 has now been completed. Arranged numerically by the number of the applicable paragraph of American Standard Z16.1-1954 (R1959), the index includes the number of the case indexed and a key letter indicating what the decision was in each case. Each index reference includes a brief description of the case.

Reprints of Cases 400-700, with the index, are now available from ASA at $2.25. Discounts for quantity orders may be obtained on request.

Are These Cases Work Injuries?

CASE 783 (1.6)

Facts not clear—no decision rendered.

CASE 784 (5.3)

A maintenance janitor who had had a degenerative arthritic condition for several years, stepped up from the level surface of a loading dock to the tailgate of a truck (about 4 inches) when he experienced a catch in his right knee. No foreign object obstructed his footing, he was not off balance, and he did not slip, but stepped fully on the ball of his right foot in a normal manner. He was alone at the time, and no one saw the incident. The employee continued to work and did not report the incident to supervision or the company medical department.

After completing his normal work period, he consulted a physician for an ailment in his right leg. The diagnosis of the condition was a knee sprain and degenerative knee joint disease, the latter an arthritic condition. He told the physician (and later a representative of the company safety department) about the day's incident, and also that about three weeks prior to this he had been lifting a can of waste material weighing about 58 lb when he had experienced a similar catch in his right knee. At that time he was standing on a level floor with both feet firmly in contact with its surface; he had not slipped and had not been off balance or out of position in relation to the object he was lifting. That incident also had been unwitnessed, and the man had continued to work, not reporting the incident to supervision or the company medical department, and not receiving medical treatment. The doctor was of the opinion that the incidents which the janitor related could have contributed to the knee sprain, but the arthritic condition of the knee was a contributing cause of injury to the leg muscles and tissue. The doctor estimated that the man would be away from work for seven days.

Decision: The actual time lost in the case should be included in the work injury rates because the employee apparently did suffer a sprain, and the incident described by the employee could have contributed to this sprain, as stated by the doctor. Unless there was definite evidence to contradict the statement by the employee, the incident should be considered an aggravation of a pre-existing condition.

CASE 785 (4.6)

On November 30 the company began a period during which no disabling injuries occurred. This continued 2½ months, until February 9. On that date, an employee who had suffered a foot injury on January 14 became disabled by reason of an infection at the seat of his original injury. The company questioned why the date of the injury was used in computing rates, rather than the date the disability began, on the basis that by using the latter as the date for there would be no question regarding determining the conclusion of the record, the record's termination.

Decision: The injury described should be charged to the date of its occurrence, January 14, as specifically covered in paragraph 4.6. This situation had been considered at the time the 1954 revision of the standard was being developed, and the full Z16 committee had agreed to this wording.

CASE 786 [A1.6 (f)]

Because an operator missed the company train on which he regularly traveled to work, he borrowed a bicycle on which he entered the plant property at 8:30 A.M. (starting time was 8:00 A.M.). He did not have a permit to travel within the plant on this type of vehicle. The man was travelling behind a truck, which stopped when approaching a railway crossing in order to wait for a locomotive which was blowing its whistle to pass. The chauffeur of a pick-up which was coming in the opposite direction did likewise. The operator on the bicycle, however, did not stop, but passed the truck on the right side, and started to cross the railway line right in front of the oncoming locomotive, which hit and killed him instantly.

Investigation showed that the locomotive driver had complied with existing regulations on railway crossings, and that he was unable to see the cyclist due to the fact that he appeared from behind the truck. Road conditions and visibility at the railroad crossing were very good.

The company asked whether this fatality could be excluded from the rates on the basis that the operator had arrived at the plant after starting time, and because he had no authorization to enter or travel within the plant on a bicycle.

Decision: This should be considered an industrial fatality and should be included in the work injury rates as such. The fact that the employee was late had no particular significance in this case. The man should be considered in the place of employment as soon as he came through the plant entrance and was on the plant premises. This accident arose out of a hazard of the employment (the necessity of crossing railroad tracks), and the fact that the man was using a bicycle without permission, and operating it unsafely, did not justify excluding the case from the records.

CASE 787 (5.4)

While a serviceman was adjusting the top burners on a customer's gas range it was necessary for him to work briefly in a squatting position. As this employee arose from the squatting position, he felt a sharp pain in his right knee. The pain continued for a short time, but he thought nothing of it as this had happened many times during the past two or three years. In a matter of 10 or 15 minutes the pain and discomfort would pass. This time, on his return to work headquarters, while in a sitting position in his truck, the knee became locked, and he was unable to move his leg from this position.

A doctor was called, and he requested the assistance of another doctor to replace the knee in normal position. Medical report of this case stated the condition as "questionable ruptured right semilunar cartilage right knee," and there was a possibility that surgery might be necessary in the future. The employee stated that this pre-existing weakness (trick knee) had existed in the ligaments or cartilage of this member for several years. Because of that, the fact that the activity of the employee immediately prior to the onset was of a bending, kneeling, or stooping nature which was not peculiar to his work, and the fact that there was no incident such as a slip, trip, or fall, the company questioned whether the three to five weeks of lost time need be included in the rates.

Decision: This should be considered a work injury and included in the rates in accordance with the ultimate extent of disability, since aggravation of the employee's pre-existing physical deficiency was work-connected.

CASE 788 (1.6)

While performing his regular duties as a member of a line crew, a groundman was climbing up onto the bed of a line truck. He had placed his right foot on the rear step of the truck and then lifted his left foot onto the truck bed, using the handrail (provided on the truck for the purpose of assisting employees in getting on the truck), to pull himself up. During this maneuver, at the time he placed his left foot flat on the truck bed, he felt something "click" in his left knee. The man was referred to several doctors over a period of several months, but the knee did not respond to conservative treatment, and grew steadily worse. The employee was finally hospitalized for an operation, and lost 46 days from work.

The doctor who performed the surgery stated that the damage could have occurred to the man in ascending a step in a building or stepping from a curb, but in this instance it occurred while he was climbing on a truck. There was no history of previous trouble and the doctor did not believe the damage occurred because of physical deficiency in the structure in the knee area.

Decision: This incident should be considered a disabling injury and included in the work injury rates in accordance with the ultimate extent of disability. The employee's statement concerning the incident was not disputed, and the statement of the doctor indicated that the injury did arise out of employment.

CASE 789

No official decision.

CASE 790 (1.6)

A railroad switchman on the night shift reported to work, appearing to be in a normal condition both mentally and physically. He pursued his normal activities with two other members of the ground crew, a conductor and another switchman, for approximately 2½ hours. At this time, because he was not present at an assigned switch which he was scheduled to operate, his co-workers proceeded to look for him. He was found in a caboose (part of the train make-up) apparently sick. The fellow workers advised him to report to the plant medical services center, but he said he was all right and did not want to report.

It was revealed later that this switchman had been sleeping on a bench in the caboose, and was injured while in this prone and sleeping position when the locomotive made contact with the caboose in coupling on to it, causing the man to strike his head againt the bulkhead. The caboose in question was used by the crew members as protection only during the time the locomotive was transporting hot slag ladles from a blast furnace area to a slag dump, and sleeping in the caboose was a specific violation of company policy.

The injured employee continued to work the remainder of his shift, at the end of which his condition became worse and he was persuaded to go to the plant medical services center for treatment. At this time he was found to be suffering from a fractured skull, and was then hospitalized. The company questioned whether this injury should be included in the rates on the basis that sleeping on the job was against company policy, and the injured man was not acting in the interest of his employer, even though he was on company property when injured.

Decision: This work injury should be included in the rates. Although falling asleep on the job is not in the best interest of the company, in this particular case the employee should not be considered to have taken himself out of his employment since the employee was permitted to use the caboose, and the injury arose out of a hazard in the movement of the caboose. Had the employee removed himself completely from his area of operation and gone off some place else to sleep, the different situation might have called for a different decision.

CASE 791 (1.6)

An employee who reported to work after he had been drinking was told by his foreman to punch out and leave the plant premises. After refusing to leave the plant premises until he had talked with the plant manager, the man was told to sit down on a bench near the working area, and wait until the manager arrived. This he did.

In the meantime, the foreman had punched the man out, and he was no longer on the clock. The foreman then returned to his regular duty, which at that time was supervising the cleaning of a filter press down in the pit, 6 ft deep, 12 ft wide, and 18 ft long.

The employee in question did not remain seated on the bench as he had been told, but got up and started down the steps leading into the pit. When he reached the last two steps at the bottom of the pit he stopped momentarily, turned around as if heading back up the stairs, then fell.

The plant manager arrived shortly after the accident, and took the man to the hospital where he talked incoherently to the doctors. A blood test was run which indicated the man had been drinking. His injuries consisted of a bruise on his lower left side. He was treated and released, but not to return to work immediately.

The man made only one visit to the company doctor to have the injury checked, and did not report back to work or even ascertain from the doctor as to when he would be able to resume working, his excuse being that he had no means of transportation.

The company did not believe that this was a chargeable accident arising out of and in the course of employment because the man was not on the clock.

Decision: This injury should not be considered a work injury, and should not be included in the work injury rates, because it did not arise out of the man's employment, nor was it associated with an activity of his employment. (NOTE: The mere fact that the foreman had taken this man out of employment on the time clock was not the controlling factor. In other circumstances, an employee may be injured and have an injury arising out of employment even though he was not "on the clock" at the time of the injury.)

STANDARDS FROM OTHER COUNTRIES

Members of the American Standards Association may borrow from the ASA Library copies of any of the following standards recently received from other countries. Information about those standards not selected for listing in THE MAGAZINE OF STANDARDS may also be obtained from the ASA Library. Orders for these standards may be sent to the country of origin through the ASA office. Titles are given here in English, but documents are in the language of the country from which they were received. For the convenience of readers, the standards are listed under their general Universal Decimal Classification number. In ordering copies, please refer to the number following the title.

621.798 PACKING AND DISPATCH. PACKAGING

Denmark (DS)

4 stds for fruit packing cases, wooden or corrugated paper DS 745/8

France (AFNOR)

Reinforced wooden cases for fruit and vegetables NF H 03-004
Wooden packing crates for fruit and vegetables NF H 03-002

India (ISI)

Rectangular cans IS:1406:1959
Round paint cans IS:1407-1959
Round "Vanaspati" tins IS:1413-1959

Pakistan (PSI)

Tea-chests and plywood for tea-chests PS:18-1958

Union of South Africa (SABS)

Dimensions and style of containers for market produce SABS 694-1959

United Kingdom (BSI)

Fiberboard baskets for tomatoes BS 3200:1960

621.86/.87 MECHANICAL HANDLING AND HOISTING EQUIPMENT

..

Austria (ÖNA)

House elevators ÖNORM B 2455
The use of tested welded round-link chains ÖNORM M 9606

France (AFNOR)

Passenger and freight elevators, electrically operated NF P 82-201

621.88 MECHANICAL ATTACHMENT AND FIXING

..

Austria (ÖNORM)

Half-round head nails for masonry ÖNORM M 5408

Belgium (IBN)

Free keying with woodruff-type key discs NBN 527
Free keying with parallel keys NBN 528

Canada (CSA)

Plain washers CSA B19.1-1960

France (AFNOR)

Screws and rivets with countersunk heads: Angles of countersunk heads NF E 27-043

Germany (DNA)

Screw plugs, hexagon socket head DIN 908
4 stds for different set screws DIN 913/6
Castellated nuts, flat, metric DIN 937
Screw driver for recessed head screws DIN 7963
2 stds for recessed head screws DIN 7962
Self-tapping recessed head screws, metric DIN 7516
Hexagon head screw plug, heavy DIN 910
2 stds for slotted nuts, metric and Whitworth thread DIN 533

India (ISI)

Dimensions of screw threads for general purposes IS:1362-1959

Ireland (IIRS)

Wood screws I.S. 97:1959

Netherlands (NNI)

Square-head wood screws, Grade G NEN 1948
Shaft ends of bolts and screws. Metric and Whitworth thread NEN 1364
2 stds for flat and oval countersunk head screws NEN 1389/90
Square nuts, unfinished, metric thread NEN 1442
3 stds for slotted headless set screws, different points, metric NEN 1486/8
Hexagon bolts. Metric screw thread, Grade M and MG NEN 1555
Hexagon nuts. Metric screw thread, Grade M and MG NEN 1560
Hexagon bolts, fully metric threaded NEN 1568
3 stds for fillister head screws, metric, Grade M NEN 1602/4
2 stds for wing screws and nuts, metric, Grade M and MG NEN 1624/5
Low square nuts. Whitworth screw thread, Grade M NEN 1782
2 stds for eyebolts and eyenuts, metric screw thread NEN 1927/8
Hexagon bolts and studs, special types NEN 2327
5 stds for different studs, metric and threaded NEN 2329/3
Low hexagon nuts, metric, Grade M NEN 2334
Socket-head cap screws NEN 1241

Poland (PKN)

Nuts, hexagonal, metric, low type PN M-82153
Nuts, square, metric PN M-82151
2 stds for nuts, hexagonal, metric, castellated PN M-82148/9
Bolts, low hexagonal head, metric PN M-82110
Cotter pins PN M-82001

Portugal (IGPAI)

Button head steel rivets, 10-32 mm diameter NP 193
Flat head countersunk steel rivets, 10-32 mm diameter NP 195
Cone head steel rivets, 6.3-32 mm diameter NP 196
Pan head steel rivets 8-28 mm diameter NP 197

United Kingdom (BSI)

American machine screws and nuts in sizes below ¼-inch diameter BS 3155:1960

621.9 TOOLS. MACHINE TOOLS. MACHINING

Finland (SFS)

Sawblades for bucksaws O.I.100

France (AFNOR)

3 stds for drill press jig bushings, fixed and movable NF E 21-001/3
Carpenter's chisel NF E 73-201
Tool shank driving squares PN E 20-011
Drills, straight shanks, extra short series PN E 66-061
Drills, straight shanks, short series PN E 66-067
Drills, Morse-taper shank, standard series PN E 66-071
Drills, short series, long straight reduced shank PN E 66-073
Three-and-four-flute Morse-taper shank core drill PN E 66-074
3 stds for different forms of lathe cutting tools PN E 66-301,-303,-305
8 stds for different types of carbide-tipped lathe tools PN E 66-331/338
3 stds for Morse-taper sleeves and arbors PN E 66-534/536

Hand reamers, straight shank PN E 74-103
Hand reamers, Morse-taper shank PN E 74-109

Japan (JISC)

3 stds for hand taps for metric, Whitworth, and Unified fine threads JIS D 4436/8

Netherlands (NNI)

Bent roughing tools. High-speed tool steel. Butt-welded NEN 1359
Sintered carbide of refractory metals for cutting tools. Classification and marking NEN 1600
Straight roughing tools. High-speed tool steel. Butt-welded NEN 1719
Side cutting tools. High-speed tool steel. Butt-welded NEN 1788
Parting tools. High-speed tool steel. Butt-welded NEN 1798
Cutting tools. High-speed tool steel. Butt-welded NEN 1976
Sintered carbide blancs. Dimensions NEN 2183

Turkey (TSE)

Steel hammers, mallets, etc TS 5

655 PRINTING AND PUBLISHING

Germany (DNA)

Kind and thickness of printing lines DIN 16521

India (ISI)

Proof corrections for printers and authors IS: 1250-1958
Rules for making alphabetical indexes IS: 1275-1958

United Kingdom (BSI)

Printed matter and stationery: A and B sizes BS 3176:1959

USSR (GOST)

Books and periodicals, sizes of GOST 5773-59
Newspapers, sizes of GOST 9254-59

666 GLASS AND CERAMIC INDUSTRY

Denmark (DS)

2 stds for hydrolytic resistance tests for glass: powder and surface DS 791/2

Spain (IRATRA)

Protective window glass panes UNE 43156

United Kingdom (BSI)

Glass container finishes: Crown finish BS 1918:Part 2:1959

667.6/.8 PAINTS. VARNISHES. LACQUERS

Australia (SAA)

Oil base wood priming paint (performance basis) K.109-1959
Oil base undercoating paint (performance basis) K.110-1959
Exterior enamelized paint for general use (performance basis) K.113-1959

Ireland (IIRS)

Extenders for paints I.S. 19:1960

Portugal (IGPAI)

Determination of pigment content NP 185

Union of South Africa (SABS)

Decorative paint with a non-aqueous solvent base, for interior use SABS 515-1959
Primers for wood for interior and exterior use SABS 678-1959
Zinc chromate primers for steel SABS 679-1959
Undercoats for paints SABS 681-1959
Roof paints SABS 683-1959

676 PAPER AND PULP INDUSTRY

Australia (SAA)

Pressure-sensitive adhesive cellulose tape Z.11-1959

Netherlands (NNI)

Paper testing. Determination of the strength of wet paper NEN 2150

United Kingdom (BSI)

Glossary of paper, stationery, and allied terms BS 3202:1960

USSR (GOST)

Printing paper for books and magazines. Sizes GOST 1342-59
Base paper for transfer pictures GOST 6291-59
Determination of morphological homogeneity of sulphate cellulose GOST 9247-59

77 PHOTOGRAPHY AND CINEMATOGRAPHY

Germany (DNA)

Sheet films and photographic paper for medical x-ray use DIN 6831
Holders for medical x-ray films or plates, dimensions DIN 6832
Motion picture feed sprocket with small teeth for 35-mm film DIN 15530
Motion picture film core DIN 15531

United Kingdom (BSI)

1-phenyl-3-pyrazolidone, photographic grade BS 3230:1960
Sizes of sentitized materials for document reproduction BS 1896:1960
Photographic electronic flash equipment BS 3205·1960
Dimensions of stereo still pictures on 35-mm film, 5-perforation format BS 3216:1960
Sizes of photographic paper rolls BS 3206:1960

USSR (GOST)

Types of motion-picture cameras for 8-mm film. Basic technical data GOST 9380-60
Types of motion-picture cameras for 16-mm film. Basic technical data GOST 9379-60
Lantern slides. Basic dimensions and types GOST 9309-59

New Books . . .

PRECISION MEASUREMENT AND GAGING TECHNIQUES. ***By William Grohe. 1960. Chemical Publishing Company, Inc, 212 Fifth Avenue, New York, N.Y. $7.50.***

A compilation of basic information on the use of gages, this little book has been written as an aid to the beginner in engineering, who may find it difficult to gain general training in precision measurement. The author has in mind not only students in technical and engineering schools but also industrial personnel who need instruction in the use, care, and wear of precision instruments. Illustrations and photographs aid in visualizing how to apply the various methods and how to use the instruments. Chapters cover gage control; gaging of screw threads; Unified threads; American National taper threads; ramp gages; fixed gages; mechanical and electronic comparators; optical measuring instruments; precision gage blocks; pneumatic gaging; measurement with light waves; surface roughness, waviness and lay; hardness testing; torque wrenches; and how to use the slide rule.

The author has given basic information on screw thread standards. However, it seems likely that the reader of the book will be left in doubt as to what the author means by the term "American Standards." Although the term is used in several cases in reference to screw threads, there is no explanation of it, nor is there a reference to the American Standard on screw threads itself. All document references relating to screw threads are to the Government's H-28 handbook or to the ASME Screw Thread Manual. Readers will be glad to know that the "American Standard" to which Mr Grohe intended to refer has now been brought up to date (see page 209) and copies of American Standard B1.1-1960 are now available.

NEW INTERNATIONAL RECOMMENDATIONS

ISO Recommendations are published by the International Organization for Standardization, and IEC Publications by the International Electrotechnical Commission, Geneva, Switzerland. Copies are available from ASA.

RECOMMENDATIONS FOR ROTATING ELECTRICAL MACHINERY (EXCLUDING MACHINES FOR TRACTION VEHICLES.)

IEC Publication 34-1. 1960. *Sixth edition.* $3.50. Applies to rotating electrical machines without limitation of output or voltage, with the exception of machines for traction vehicles. These are covered by IEC Publications 48 on electric traction motors, 101 on machines on motor

vehicles, and 102 on vehicles with Diesel engines. The following subjects are covered: Definitions, rating, service conditions, rise, dielectric tests, excess current and excess torque, commutation test, tolerances, and rating plates. In this new edition, changes have been made in the sections on definitions, ratings, and rating plates. The most important change, however, is the inclusion of new classes of insulating materials. These materials are described in IEC Publication 85.

INTERNATIONAL ELECTROTECHNICAL VOCABULARY. GROUP 08: ELECTRO-ACOUSTICS.
IEC Publication 50(08). 1960. $4.00. Some 195 terms and their definitions are included in both French and English, together with equivalent terms in German, Spanish, Italian, Dutch, Polish, and Swedish. Indexes are provided in each of the eight languages. The terms and definitions are divided into the following sections: General terms; acoustical and electro-acoustic transmission systems; microphones, loudspeakers and receivers; recording and reproduction; and various apparatus.

INTERNATIONAL ELECTROTECHNICAL VOCABULARY. GROUP 40: ELECTRO-HEATING APPLICATIONS.
IEC Publication 50(40). 1960. $3.20. Terms used in connection with electroheating applications, and their definitions in French and English, are standardized for international use in this new publication. Equivalent terms are included, without definitions, in German, Spanish, Italian, Dutch, Polish, and Swedish. Indexes are provided in each of the eight languages. The terms and definitions cover: General terms; furnaces and other electrically heated appliances for industrial purposes (excluding welding); electric welding, brazing, soldering, and cutting; apparatus for electric space heating; electric heating appliances for cooking and various uses.

RECOMMENDED METHODS OF MEASUREMENT ON RECEIVERS FOR TELEVISION BROADCAST TRANSMISSIONS.
IEC Publication 107. 1960. *First edition.* 119 *pp plus* 29 *pp of figures.* $10.00. Describes methods of measuring the electrical, acoustical, and optical properties of television broadcast receivers designed for monochrome vision reception of 405, 525, 625, and 819 line transmissions of either negative or positive modulation and the associated a.m. or f.m. sound channel. The objective of this publication is to present a catalog of selected measurements recommended for assessing the essential properties of a receiver under standard conditions to facilitate comparison of the results of measurements in different laboratories. This publication is not concerned with limiting values for acceptable performance.

News Briefs . . .

• "THE INTERNATIONAL Organization for Standardization—called the ISO—and its autonomous affiliate in the electrical field, the International Electrotechnical Commission—called the IEC—are devoted to the coordination of national standards in the entire electrical field and in all other fields ranging from screw threads through digital computers. Working through a total of 138 technical committees, these two organizations have developed over 270 International Recommendations with many more in process toward final approval. These Recommendations can serve under-developed countries as the basis for standards in their national and international trade without any implication of adherence to any specific form of economic system. Through the headquarters of the two organizations at Geneva, under-developed nations can receive assistance in developing their own national standards bodies, or, pending such action, in adopting for their own use the International Recommendations cited."

Statement to Conference of Non-governmental Organizations, United Nations, May 17 and 18, presented by Vice Admiral G. F. Hussey, Jr, USN (Ret), managing director of ASA, representing the International Organization for Standardization.

• SEVENTY-FIVE engineering executives of the United Kingdom, Canada, and the USA met in Ottawa, Canada, June 6-10, and made progress in expanding the ABC agreements on unification of engineering standards. Subjects discussed included the Unified screw threads, limits and fits, drafting practice, and surface finish of machined parts.

The meetings were held at Ottawa on the invitation of the Canadian Steering Committee for Unification of ABC Engineering Standards, of which J. G. Morrow, Hamilton, Ontario, is chairman. Mr Morrow, formerly a vice-president of the Steel Company of Canada, is a past president of the American Iron and Steel Institute. Leader of the British delegation was Sir Anthony Bowlby of Guest, Keen, and Nettlefolds of Birmingham, England. Roy Trowbridge, General Motors Corporation, Detroit, and chairman of the subcommittee on international cooperation of Sectional Committee B1 on screw threads, was head of the U. S. delegation.

• ROSE V. WHITE has joined the staff of the American Standards Association as home economist and will serve as secretary of the Consumer Goods Standards Board.

Miss White will be responsible for servicing 23 consumer standards projects being conducted under ASA procedures, many of them being in the textile field. She will also be called upon to work with industry and consumer groups in implementing the newly approved and published American Standard L22, performance requirements for textile fabrics. Miss White fills the ASA post vacated by the retirement of George G. Sommaripa.

Miss White has been in the home service department of the Corn Products Company since 1949 where she was responsible for laundry products tests, preparation of package directions on five home laundry products, and for information in consumer publications on laundering.

Rose V. White

She has been home economist and director of kitchen planning, American Kitchens, AVCO Manufacturing Corporation, Connorsville, Indiana. Miss White was a county home demonstration agent in the Arkansas Agricultural Extension Service and has also been a junior high school home economics teacher at Chattanooga, Tennessee.

Educated in the public schools of her home town, Chattanooga, Miss White received her B.S. in Home Economics at the University of Tennessee. Following three years of active service as a WAVE Officer, U.S. Naval Reserve, during World War II, Miss White received her M.S. in Home Economics, major in household

equipment, at Purdue University in 1947.

Miss White is a Lieutenant in the U.S. Naval Reserve. She is a member of the New York Home Economics in Business Section of the American Home Economics Association; the national board of directors of the Electrical Women's Round Table, Inc, and the home economics committee of the American Home Laundry Manufacturers' Association. She has served as past secretary, New York Chapter, American Women's Voluntary Services, Inc.

• SEVENTY-EIGHT delegates from 14 countries attended the third meeting of ISO Technical Committee 85, Nuclear Energy, at Geneva, Switzerland, May 23 through June 1. Observers from two other countries and representatives from seven international organizations also attended.

Alfred Iddles, past president of the Babcock and Wilcox Company, USA, was chairman of the general sessions. The American Standards Association, U. S. member of the International Organization for Standardization, holds the secretariat for ISO/TC 85.

The following results were reported: *Subcommittee 1, Terminology, Definitions, Units and Symbols,* agreed on a draft ISO proposal describing a basic ionizing radiation symbol and referred it to the entire TC 85 committee for further comment by the cooperating international organizations and vote by the committee members. The subcommittee also agreed on English definitions for 77 concepts which, with French and Russian translations, will be included in a glossary of nuclear terms. Sixty-eight new concepts were agreed on to be defined and included in the glossary. *Subcommittee 2, Radiation Protection,* agreed on three draft ISO proposals and submitted them to the entire committee for approval. They are: (1) Units of the characteristic quantities of an ionizing radiation source; (2) Characteristic quantities and units of a field of ionizing radiation; (3) Units of the irradiation of an individual. The subcommittee also created a working group on the means of sampling and extracting radioactive contamination from samples of air and water. *Subcommittee 3, Reactor Safety,* has set up working groups on reactor siting, containment structures, and meteorological aspects of reactor safety. The member organizations undertook to continue to develop papers on behavior of reactors in relation to coolants, reactivity, operating procedures and operators' qualifications, safety devices for reactor shutdown, casual criticality, and irradiation effects on steel. *Subcommittee 4, Radioisotopes,* discussed the activities of its three working groups, (1) sealed sources, (2) unsealed sources, and (3) packaging. Working Group 1 was asked to prepare a revised version of a document on radiography sealed sources for discussion at the next plenary meeting of the subcommittee. Working Group 2 was asked to revise its program of work and to call its first meeting with the participation of interested member bodies and international organizations. Working Group 3 was authorized to give priority to work on general requirements for transport containers, and to marking of transport containers. Subcommittee 4 plans to study the possibility of forming a fourth working group on measurements of properties of radiation sources.

Alfred Iddles (center) presides at the ISO/TC 85 meeting in Geneva. With him at the table are Henry Lamb (left), of ASA's staff, and Henry St Leger (right).

• DONALD J. MUNSON, new member of ASA's Standards Council, represents the American Ladder Institute. Mr Munson is vice-president in charge of manufacturing of the J. R. Clark Company, Spring Park, Minnesota, and Reading, Pennsylvania. He is also a member of the Board of Directors of Superior Electronics Company, Incorporated, of Minneapolis.

Donald J. Munson

Mr Munson is a graduate of the University of Minnesota with an M.E. degree. He served during World War II as Lieutenant in the U.S. Naval Reserve.

• *From a paper presented by Roy P. Trowbridge, General Motors Corporation, at the Annual Conference for Engineers and Architects, Ohio State University, May 6, 1960:*

MANY STUDIES have been made to evaluate company standardization programs of technical societies, trade associations, and the ASA. On company standards programs, reports have been made of economies resulting from standardization ranging from one percent to more than four percent of gross annual sales. At best, these figures are estimates, because in arriving at the savings resulting from standardization, it is next to impossible to place value on the many intangibles which accrue from the program. This is particularly true where a standards program has been in effect for a considerable length of time because there are few "before" and "after" figures for comparison purposes.

It goes without saying that standards programs cannot be conducted without adequate manpower and funds. All too often, companies, both small and large, relegate standards

to a "dusty-corner" existence by haphazardly picking up and using only those standards which are called to their attention when some costly practice is uncovered. Other companies may take the attitude that, while they are perfectly willing to use all of the newest and latest standards, when it comes to developing the standards, they are willing to "let George do it." To my mind, both types of thinking penalize a company.

Vigorous, intelligent participation in the standards programs of a company's industry and in the American Standards program pays off in three ways. First, and most important to the company, is that by participating in outside standards work they protect themselves against formulation of standards which might prove to be costly or inimical to the best interests of the company; second, participation in projects of interest to the company allows that company to take immediate advantage of new standards developments; and, third, the company benefits by the pool of technical knowledge supplied by the many experts who are also participating in the standards programs. In effect, the technical know-how of a company in a given standards area is increased many-fold by this consultative feature of standards work.

Cooperation to the fullest extent possible by American companies in the standardization programs of their industry and in the American Standards movement is urgently needed. Without such participation the formulation of good, practical standards and coordination of standards between industries is painstakingly slow. In the meantime, the cost of inefficiencies resulting from off-breed or conflicting standards continues to mount.

• IN VIEW of the active work in ASA projects on materials handling, MH1-MH8, the American Standards Association is acting as co-sponsor of the technical symposium segment of the Cargo Handling Exposition and Symposium to be held in New York, September 27-29. The event is being sponsored by the New York Chapter of the United States Merchant Marine Academy Alumni Association, Inc, with the cooperation of the City of New York, Department of Marine and Aviation. The international Cargo Handling Coordination Association and the United States Merchant Marine Academy are acting as joint sponsors with ASA of the technical symposium.

Pier One, North River, has been made available by the New York City Department of Marine and Aviation for the event. A "Containerama," which will feature working demonstrations of heavy equipment, such as containers, handling gear, and fork lift trucks, will be held on a plaza at the entrance to the pier.

One of the principal topics of the symposium will be containerization.

At the present time a proposed American Standard for nominal sizes of van containers is being circulated for comment. Work is also under way to establish American Standard sizes for pallet containers and cargo unit containers, the ultimate objective being completely interchangeable use of shipping containers on all common carriers.

PROGRAM PLANS

Eleventh National Conference on Standards

INFORMATION ON THE STANDARDS NEEDS of the Department of Defense, affecting companies engaged in the design and manufacture of defense equipment, is expected to be presented during the 11th National Conference on Standards at the Sheraton-Atlantic Hotel, New York City, October 25-27.

Among the groups sponsoring sessions at the three-day meeting are the Department of Defense, the National Association of Purchasing Agents, the American Society for Quality Control, the American Statistical Association, the Modular Building Standards Association, and the Company Member Conference of ASA.

According to a tentative program, the Department of Defense presentation will be divided into two sections. One session will deal with standardization and logistics management, and the other with the plans of the Department to implement its standardization responsibilities in the light of military-industry needs and experience. Spokesmen for the Standardization Division are expected to use the Conference as a forum to present the latest Department policy on standardization to all companies engaged in the design and development of military equipment.

The theme of the sessions sponsored by the Modular Building Standards Association will be the development and need for standardization in the building industry. Speakers representing the National Association of Home Builders, the Producers' Council, the American Institute of Architects, and the Associated General Contractors, will relate the benefits of standardization to their particular segments of the industry. The economic advantages of modular standards for products, equipment, and assembly methods will be presented by two speakers. The newly published Building Products Registry of the American Institute of Architects will be the subject of one paper. The many needs for additional standards in the building field will also be discussed.

One of the sessions scheduled will explore the various ways in which standardization helps management achieve its objectives of increased sales, production, and earnings. Executive spokesmen from the aircraft, petroleum, electronics, and chemical industries will take part in this forum.

A highlight of the Conference will be the presentation of the two highest honors in the standards field, the Howard Coonley Medal and the Standards Medal, to be awarded at a luncheon on October 26.

In order to make it possible for delegates to attend all sessions of the Conference, the sessions will be held consecutively. In the past, some had been held concurrently.

news briefs . . . continued

• FOLLOWING APPROVAL of the new American Standard L22, which provides performance requirements for all kinds of textiles in relation to the use for which they are intended, the Board of Directors of the Textile Distributors Institute adopted the following resolution:

"WHEREAS, The Textile Distributors Institute, Inc, has been engaged for many years in developing satisfactory minimum end-use performance standards for textile fabrics and its findings and recommendations have been substantially incorporated in American Standard L22 recently promulgated by the American Standards Association, and

"WHEREAS, The Textile Distributors Institute, Inc, believes that the application and implementation of such end-use standards by all segments of industry will serve to promote the welfare of the textile industry and the best interests of consumers,

"Now, therefore, it is

"RESOLVED, That the Textile Distributors Institute, Inc, does hereby endorse the principle of the American Standards Association Standard L22 governing end-use performance standards for textile fabrics and recommends that its members and all other affected industries adopt and apply such standards wherever practicable or desirable to their products."

• SIR CECIL WEIR, chairman of International Computers and Tabulators, Ltd, accepted the chairmanship of the British Standards Institution's Export Panel early this year. The panel advises BSI on major policy questions affecting export trade. It has repeatedly urged British industry to play a strong and effective part in international standards work and to see that British Standards are framed to meet the requirements of overseas markets.

• VICE ADMIRAL D. Francisco I. Stewart, for 15 years president of IRAM, the Argentine national standards association, passed away April 9 after a short illness. Admiral Stewart was 79 years of age. In announcing his death, Ing. Beatriz Ghirelli de Ciaburri, general director of IRAM, comments that Admiral Stewart "held the presidency of IRAM with the greatest devotion and enthusiasm, which makes his death especially painful to us."

Admiral Stewart was graduated from the Naval School of Argentina. As a first lieutenant of the Navy, he studied hydrography in the United States. As rear admiral, he commanded the flag ship of the torpedo boat fleet and became head of the Navy Military School. As vice admiral, he was chief of the Hydrographical Commission of Beagle Canal in 1929, and head of the secretariat of the Marine Ministry.

In 1941, he gave up his responsibility for the Military Naval School and assumed chairmanship of the Administrative Commission of the Argentine merchant fleet. He had served as president of IRAM since 1945.

Admiral Stewart had many decorations, including the Venezuelan Order of the Liberator, the French Legion of Honor, the Naval Merit of the King of Spain, Victoria Order of Great Britain, and the Fourth Class Order of Tresore of the Empire of Japan.

Dr Carlos A. Abeledo, formerly first vice-president, has now taken over as president of IRAM.

AMERICAN STANDARDS

Just Published . . .

If your company is a member of the American Standards Association, it is entitled to receive membership service copies of these newly published American Standards. The ASA contact in your company receives a bimonthly announcement of new American Standards, which also serves as an order form. Find out who your ASA contact is and order your American Standards through him. He will make sure your company receives the service to which it is entitled.

ACOUSTICS, VIBRATION, AND MECHANICAL SHOCK

Calibration of Shock and Vibration Pickups, Methods for, S2.2-1959 $2.50
Sets forth general principles of the calibration of shock and vibration pickups and describes methods of calibration which have been proved to give reliable and reproducible results so that accurate measurements may be made of the shocks and vibrations to which aircraft, missiles, and other high performance equipment are subjected in service.
Sponsors: Acoustical Society of America; American Society of Mechanical Engineers

Calibration of Mechanically-Recorded Lateral Frequency Records (58 IRE 19.S1), S4.1-1960 $0.60
Three basic methods for calibrating laterally modulated frequency records used for calibrating recording systems and recording heads, and which are available commercially for testing phonograph pickups and reproducing systems.
Sponsor: Institute of Radio Engineers

BUILDING AND CONSTRUCTION

Clay Drain Tile, Tentative Specifications for, ASTM C 4-59T; ASA A6.1-1960 (Revision of ASTM C 4-55; ASA A6.1-1956) $0.30
Specifications covering drain tile made from clay, shale, fire clay or mixtures thereof, and burned. Provides table for physical requirements of the tiles. Outlines test procedures to be followed for crushing strength test, absorption test, and freezing and thawing test.
Sponsor: American Society for Testing Materials

Rail-Steel Bars for Concrete Reinforcement, Tentative Specifications for, ASTM A 16-59T; ASA A50.2-1960 (Revision of ASTM A 16-57; ASA A50.2-1958) $0.30
Specifications covering two grades of rail steel concrete reinforcement bars: regular and special. Specifies material

to be used in manufacture, tensile properties required, number of tests required, permissible variations in weight and marking requirements.

Sponsor: American Society for Testing Materials

Hollow Load-Bearing Concrete Masonry Units, Specifications for, ASTM C 90-59; ASA A79.1-1960 (Revision of ASTM C 90-52; ASA A79.1-1953) $0.30

Covers hollow load-bearing concrete masonry wall units made from portland cement and suitable aggregates such as sand, gravel, crushed stone, bituminous or anthracite cinders, burned clay or shale, pumice, volcanic scoria, air-cooled or expanded blast-furnace slag, and other slag.

Sponsor: American Society for Testing Materials

Solid Load-Bearing Concrete Masonry Units, Specifications for, ASTM C 145-59; ASA A81.1-1960 (Revision of ASTM C 145-52; ASA A81.1-1953) $0.30

Specifications cover solid load-bearing concrete masonry wall units (concrete block or tile units with 75 percent or more net area) made from portland cement and suitable aggregates such as sand, gravel, crushed stone, bituminous or anthracite cinders, burned clay or shale, pumice, volcanic scoria, air-cooled or expanded blast-furnace slag, and other slag.

Sponsor: American Society for Testing Materials

Ceramic Glazed Structural Clay Facing Tile, Facing Brick, and Solid Masonry Units, Specifications for, ASTM C 126-59T; ASA A101.1-1960 (Revision of ASTM C 126-57T; ASA A101.1-1958) $0.30

Covers structural clay load-bearing facing tile and facing brick and other solid masonry units made from clay, shale, fire clay, or mixtures thereof, with or without addition of grog or other admixtures, having a finish consisting of a ceramic glaze, excluding natural salt glazed ware for use with narrow mortar joints, where variation of face dimension must be very small and where only one finished face or two opposite faces will be exposed.

Sponsor: American Society for Testing Materials

Dry-Set Portland Cement Mortar, Specification for, A118.1-1959 $0.50

Definitions, sampling, and methods of test with minimum test requirements for free water content, lumping, set, open time, adjustability, skinning, sag, cohesion, shrinkage, bond strength, and staining of dry-set portland cement mortar used for the installation of ceramic tile.

Sponsor: Tile Council of America

DRAWINGS, SYMBOLS AND ABBREVIATIONS

Time Series Charts, Y15.2-1960 [Revision of Z15.2-1938 (R1947)] $3.50

Brings together procedures which have been found successful in constructing time-series charts and treats the different phases of chart construction in detail.

Sponsor: American Society of Mechanical Engineers

ELECTRIC AND ELECTRONIC

Definitions of Electrical Terms: Group 45—Electromechanical Devices, C42.45-1959 (Partial revision of C42-1941) $1.00

Contains definitions of terms on elevators, cranes, derricks, and hoists.

Sponsor: American Institute of Electrical Engineers

250-Watt (H5) BT-28 Mercury Lamp, Physical and Electrical Characteristics of, C78.1301-1960 $0.35

175-Watt (H22) BT-28 Mercury Lamp, Physical and Electrical Characteristics of, C78.1308-1960 $0.35

250-Watt (H5) BT-28 Mercury-Fluorescent Lamp, Physical and Electrical Characteristics of, C78.1315-1960 $0.35

175-Watt (H22) BT-28 Mercury-Fluorescent Lamp, Physical and Electrical Characteristics of, C78.1316-1960 $0.35

The standards in the C78 series cover physical characteristics and electrical starting and operating requirements established for the purpose of ensuring interchangeability of lamps used for general lighting.

Sponsor: Electrical Standards Board

MECHANICAL

Unified Screw Threads, B1.1-1960 (Revision of B1.1-1949) $5.00

Covers a complete system for screw threads, giving details of thread form, thread series and suggested applications, thread classes, selection and designation, allowances and tolerances. The standard contains only those threads considered to be unified. American National screw threads are to be found in the Appendixes, which also cover terminology and symbols, thread form and formulas, tables of basic dimensions, and formulas for limits of size.

Sponsors: American Society of Mechanical Engineers; Society of Automotive Engineers

MINING

Wire Ropes for Mines, Specifications for and Use of, M11.1-1960 $3.00

Specifications for the construction and use of 28 types of wire rope used for mining applications. Provisions on construction include material and workmanship, requirements on size, weight, and breaking strength. Provisions on use of wire rope include selection and practices for storage, handling, attachments, installation, maintenance, inspection, and removal.

Sponsors: American Mining Congress; Wire Rope Technical Board

PHOTOGRAPHY

Roll Film and Leaders and Trailers for Aerial Photography, Dimensions for, PH1.10-1960 (Revision of PH1.10-1952) $0.35

Sponsor: Photographic Standards Board

SAFETY

Industrial Accident Prevention Signs, Specifications for, Z35.1-1959 (Revision of Z35.1-1941) $1.35

These specifications apply to design, application, and use of signs or symbols intended to indicate and, in so far as possible, to define specific hazards of a nature such that failure to designate them may lead to accidental injury to workers or the public, or both, or property damage.

Sponsor: National Safety Council

TEXTILES

Single Jute Yarn, Methods of Testing and Tolerances for, ASTM D 541-58; ASA L14.34-1960 (Revision of L14.34-1953) $0.35

Testing and tolerances applying to single jute yarns.

Jute Rove and Plied Yarn for Electrical and Packing Purposes, Methods of Testing and Tolerances for, ASTM D 681-58; ASA L14.44-1960 (Revision of L14.44-1953) $0.30

Applies to plied jute yarn and single and plied jute rove, both treated and untreated.

Rope Made from Bast and Leaf Fibers, Methods of Testing and Tolerances for, ASTM D 738-58; ASA L14.45-1960 (Revision of L14.45-1953) $0.30

Applies only to rope made from leaf or bast fibers or mixtures of those fibers.

Sponsors: American Association of Textile Chemists and Colorists: American Society for Testing Materials

In Process . . .

As of June 20, 1960

Standards Council gives final approval to American Standards. Board of Review acts for Standards Council (takes about 2 weeks). Standards Board approves standards to send to Board of Review or Standards Council (takes about 4 weeks).

ACOUSTICS, VIBRATION, AND MECHANICAL SHOCK

American Standards Approved

Acoustical Terminology, S1.1-1960 (Revision of Z24.1-1951)

Sponsor: Acoustical Society of America

Characteristics of Auxiliary Equipment for Shock and Vibration Measurements, Method for Specifying, S2.4-1960

Sponsors: Acoustical Society of America; American Society of Mechanical Engineers

Criteria for Background Noise in Audiometer Rooms, S3.1-1960

Sponsor: Acoustical Society of America

Monosyllabic Word Intelligibility, Method for Measurement, S3.2-1960

Sponsor: Acoustical Society of America

BUILDING AND CONSTRUCTION

American Standard Approved

Lime-Cement Stucco, Specifications for, A42.5-1960

Sponsors: American Society for Testing Materials; American Institute of Architects

In Board of Review

Fire Tests of Door Assemblies, Methods of, ASTM E 152-58; NFPA No. 252; ASA A2.2- (Revision of ASTM E 152-55T; ASA A2.2-1956)

Sponsors: National Bureau of Standards; National Fire Protection Association; American Society for Testing Materials

In Standards Board

Polysulfide Base Sealing Compounds for the Building Trade, Specification for, A116.1-

Withdrawal Being Considered

Coal-Tar Pitch for Steep Built-Up Roofs, Specifications for, ASTM D 654-49; ASA A109.7-1955

Sponsor: American Society for Testing Materials

CINEMATOGRAPHY

In Standards Board

Transmission Density of Motion-Picture Films, Method of Determining, PH22.-27- (Revision of PH22.27-1947)

Reel Spindles for 16mm Motion-Picture Projectors, PH22.50- (Revision of PH22.50-1946)

9-kc Sound Focusing Test Film for 35mm Motion-Picture Sound Reproducers, PH22.62- (Revision of PH22.-62-1948)

1000-Cycle Balancing Test Film for 35mm Motion-Picture Sound Reproducers, PH22.67- (Revision of PH22.-67-1948)

Sponsor: Society of Motion Picture and Television Engineers

DRAWINGS, SYMBOLS AND ABBREVIATIONS

American Standard Approved

Metallizing Symbols, Y32.12-1960

Sponsors: American Society of Mechanical Engineers; American Institute of Electrical Engineers

In Board of Review

American Standard Drafting Manual, Section 15—Electrical Diagrams, Y14.15-

Sponsors: American Society of Mechanical Engineers; American Society for Engineering Education

ELECTRIC AND ELECTRONIC

American Standard Approved

Safety Rules for the Installation and Maintenance of Electric Supply and Communication Lines (Including Definitions and Grounding Rules), NBS Handbook H32; ASA C2.2-1960 [Revision of C2.2-1941 (R1947)]

Sponsor: National Bureau of Standards

In Standards Board

Aluminum Conduit, Specification for, C80.5-

Sponsors: American Iron and Steel Institute; National Electrical Manufacturers Association

GAS-BURNING APPLIANCES

In Board of Review

Addenda Z21.10.1a to American Standard Approval Requirements for Gas Water Heaters, Volume I, Z21.10.1-1959

Addenda Z21.13.2b to American Standard Approval Requirements for Central Heating Gas Appliances, Volume II, Gravity and Forced Air Central Furnaces, Z21.13.2-1958 and Addenda Z21.13.2a-1959

Addenda Z21.22a to American Standard Listing Requirements for Relief Valves and Automatic Gas Shut-Off Devices for Hot Water Supply Systems, Z21.-22-1958

Sponsor: American Gas Association

In Standards Board

Addenda Z21.1.1a to American Standard Approval Requirements for Domestic Gas Ranges, Volume I, Free Standing Units, Z21.1.1-1959

Addenda Z21.1.2a to American Standard Approval Requirements for Domestic Gas Ranges, Volume II, Built-In Domestic Cooking Units, Z21.1.2-1959

Approval Requirements for Hotel and Restaurant Gas Ranges and Unit Broilers, Z21.3- (Revision of Z21.3-1956, Z21.3a-1957, Z21.3b-1959)

Addenda Z21.5a to American Standard Approval Requirements for Domestic Gas Clothes Dryers, Z21.5-1959

Approval Requirements for Domestic Gas-Fired Incinerators, Z21.6- (Revision of Z21.6-1957, Z21.6a-1958, Z21.6b-1959)

Approval Requirements for Gas Water Heater, Z21.10.1- (Revision of Z21.-10.1-1959 (Volume I)

Addenda Z21.10.2a to American Standard Approval Requirements for Gas Water Heaters, Volume II, Side-Arm Type Water Heaters, Z21.10.2-1959

Approval Requirements for Gas Water Heaters, Volume III, Circulating Tank, Instantaneous and Large Automatic Storage Type Water Heaters, Z21.10.3-

Addenda Z21.11a to American Standard Approval Requirements for Gas-Fired Room Heaters, Z21.11-1959

Addenda Z21.13.1b to American Standard Approval Requirements for Central Heating Gas Appliances, Volume I, Steam and Hot Water Boilers, Z21.-13.1-1958, Z21.13.1a-1959

Addenda Z21.13.4b to American Standard Approval Requirements for Central Heating Gas Appliances, Volume IV, Gravity and Fan Type Vented Recessed Heaters, Z21.13.4-1958, Z21.-13.4a-1959

Addenda Z21.15b to American Standard Listing Requirements for Manually Operated Gas Valves, Z21.15-1958, Z21.15a-1959

Approval Requirements for Gas Unit Heaters, Z21.16- (Revision of Z21.16-1957, Z21.16a-1958, Z21.16b-1959)

Addenda Z21.17b to American Standard Listing Requirements for Domestic Gas Conversion Burners, Z21.17-1958, Z21.17a-1959

Approval Requirements for Refrigerators Using Gas Fuel, Z21.19- (Revision of Z21.19-1941)

Listing Requirements for Metal Connectors for Gas Appliances, Z21.24- (Revision of Z21.24-1955, Z21.24a-1956, Z21.24b-1959)

Addenda Z21.27a to American Standard Approval Requirements for Hotel and Restaurant Gas Deep Fat Fryers, Z21.27-1959

Approval Requirements for Portable Gas Baking and Roasting Ovens, Z21.28- (Revision of Z21.28-1956, Z21.28a-1957, Z21.28b-1959)

Approval Requirements for Gas Counter Appliances, Z21.31- (Revision of Z21.-31-1956, Z21.31a-1957, Z21.31b-1959)

Addenda Z21.34b to American Standard Approval Requirements for Gas-Fired Duct Furnaces, Z21.34-1958, Z21.34a-1959

Addenda Z21.40a to American Standard Approval Requirements for Gas-Fired Absorption Summer Air Conditioning Appliances, Z21.40-1959

Sponsor: American Gas Association

MATERIALS AND TESTING

In Board of Review

Quicklime for Structural Purposes, Specification for, ASTM C 5-59; ASA K67.1-

Normal Finishing Hydrated Lime, Specification for, ASTM C 6-49; ASA K67.2-

Chemical Analysis of Limestone, Quicklime, and Hydrated Lime, Methods of, ASTM C 25-58; ASA K67.3-

Quicklime and Hydrated Lime for Cooking of Rags in Paper Manufacture, Specification for, ASTM C 45-25; ASA K67.4-

Quicklime for Sulfite Pulp Manufacture, Specification for, ASTM C 46-27; ASA K67.5-

Quicklime and Hydrated Lime for Silica Brick Manufacture, Specification for, ASTM C 49-57; ASA K67.6-

Sampling, Inspection, Packing and Marking of Lime and Limestone Products, Methods of, ASTM C 50-57; ASA K67.7-

Definitions of Terms Relating to Lime, ASTM C 51-47; ASA K67.8-

Quicklime and Hydrated Lime for Water Treatment, Specification for, ASTM C 53-52T; ASA K67.9-

Physical Testing of Quicklime and Hydrated Lime, Methods of, ASTM C 110-58; ASA K67.10-

Hydraulic Hydrated Lime for Structural Purposes, Specification for, ASTM C 141-55; ASA K67.11-

Special Finishing Hydrated Lime, Specification for, ASTM C 206-49; ASA K67.12-

Hydrated Lime for Masonry Purposes, Specification for, ASTM C 207-49; ASA K67.13-

Quicklime for Calcium Carbide Manufacture, Specification for, ASTM C 258-52; ASA K67.14-

Hydrated Lime for Grease Manufacture, Specification for, ASTM C 259-52; ASA K67.15-

Fly Ash for Use as a Pozzolanic Material with Lime, Specification for, ASTM C 379-56T; ASA K67.16-

Quicklime and Hydrated Lime for Neutralization of Waste Acid, Methods of Testing, ASTM C 400-57T; ASA K67.-17-

Quicklime and Hydrated Lime for Sand-Lime Products, Specification for, ASTM C 415-58T; ASA K67.18-

Pozzolans for Use with Lime, Specification for, ASTM C 432-59T; ASA K67.19-

Quicklime and Hydrated Lime for Hypochlorite Bleach Manufacture, Specification for, ASTM C 433-59T; ASA K67.20-

Sponsor: American Society for Testing Materials

MECHANICAL

American Standard Approved

Standard Shapes and Sizes of Grinding Wheels, B74.2-1960

Sponsor: Grinding Wheel Institute

In Board of Review

Spindle Noses and Arbors for Milling Machines, B5.18- (Revision of B5.18-1953)

Sponsors: American Society of Tool Engineers; Metal Cutting Tool Institute; National Machine Tool Builders' Association; Society of Automotive Engineers; American Society of Mechanical Engineers

In Standards Board

Involute Splines, Serrations, and Inspection, B5.15- (Revision of B5.15-1950; B5.26-1950; B5.31-1953)

Sponsors: American Society of Tool and Manufacturing Engineers; Metal Cutting Tool Institute; National Machine Tool Builders' Association; Society of Automotive Engineers; American Society of Mechanical Engineers

Reaffirmation Being Considered

Leaf Chain, B29.8-1958

Sponsors: American Society of Mechanical Engineers; Society of Automotive Engineers

PIPE AND FITTINGS

American Standards Approved

Pressure-Temperature Ratings for Types 304L and 316L Flange Series, B16.-5a-1960 (Addendum to B16.5-1957, Steel Pipe Flanges and Flanged Fittings)

Ratings for Non-Ferrous Wrought Flanges, B16.5b-1960 (Addendum to B16.5-1957, Steel Pipe Flanges and Flanged Fittings)

Sponsors: American Society of Mechanical Engineers; Mechanical Contractors Association of America; Manufacturers Standardization Society of the Valve and Fittings Industry

In Board of Review

Dryseal Pipe Threads, B2.2- (Partial revision of B2.1-1945, Pipe Threads)

Sponsors: American Society of Mechanical Engineers; American Gas Association

Seamless Steel Boiler Tubes for High-Pressure Service, Specifications for, ASTM A 192-58T; ASA B36.14- (Revision of ASTM A 192-55T; ASA B36.14-1956)

Electro-Resistance-Welded Steel Boiler and Superheater Tubes for High-Pressure Service, Specifications for, ASTM A 226-58T; ASA B36.18- (Revision of ASTM A 226-55T; ASA B36.18-1956)

Black and Hot-Dipped Zinc-Coated (Galvanized) Welded and Seamless Steel Pipe for Ordinary Uses, Specifications for, ASTM A 120-57T; ASA B36.20- (Revision of ASTM A 120-54; ASA B36.20-1958)

Copper-Brazed Steel Tubing, Specifications for, ASTM A 254-58; ASA B36.-35- (Revision of ASTM A 254-55T; ASA B36.35-1956)

Seamless and Welded Ferritic Stainless Steel Tubing for General Service, Specifications for, ASTM A 268-58; ASA B36.36- (Revision of ASTM A 268-55; ASA B36.36-1956)

Seamless and Welded Austenitic Stainless Steel Sanitary Tubing, Specifications for, ASTM A 270-58; ASA B36.-38- (Revision of ASTM A 270-55; ASA B36.38-1956)

Sponsors: American Society for Testing Materials; American Society of Mechanical Engineers

In Standards Board

Pressure Temperature Ratings for Flanges Made of Aluminum Alloys, B16.5c- (Addendum to B16.5-1957, Steel Pipe Flanges and Flanged Fittings)

Sponsors: American Society of Mechanical Engineers; Manufacturers Standardization Society of the Valve and Fittings Industry; Mechanical Contractors Association of America

SAFETY

American Standard Approved

Safety Code for Aerial Passenger Tramways, B77.1-1960

Sponsors: Eastern Ski Area Operators Association; American Society of Mechanical Engineers

In Board of Review

Power Lawn Mowers, Safety Specifications for, B71.1-

Sponsor: Lawn Mower Institute

Fundamentals Governing the Design and Operation of Local Exhaust Systems, Z9.2-

Sponsors: American Society of Heating, Refrigerating and Air-Conditioning Engineers; American Industrial Hygiene Association; Air Moving and Conditioning Association

NEWS ABOUT AMERICAN STANDARDS PROJECTS

Code for Pressure Piping, B31—

Sponsor: The American Society of Mechanical Engineers.

Interpretations submitted by the sponsor.

From time to time certain actions of Sectional Committee B31 are published for the information of interested parties. While these do not constitute formal revision of the Code, they may be utilized in specifications, or otherwise, as representing the considered opinions of the committee.

Pending revision of the Code for Pressure Piping, B31.1-1955, the sectional committee has recommended that ASME, as sponsor, and ASA publish selected interpretations so that industry may take immediate advantage of corresponding proposed revisions. Recently a number of cases concerning piping in nuclear power plants have been approved for publication. These are identified as N-1, N-7, N-8, N-9, and N-10. Cases N-2 and N-6 are not ready for publication at this time, but are currently under review by the Advisory Committee on Nuclear Piping.

Cases N-1 and N-7 were published in the April issue; N-8 appeared in May, and N-9 in June.

CASE N-10

Inquiry: Under what conditions may cast austenitic steel butt welding fittings be used within the scope of Section 1 of the Code for Pressure Piping for nuclear service?

Reply: It is the opinion of the committee that ASTM Specification A 351 and American Standard B16.9-1958 are not sufficiently definitive for acceptance for nuclear service as currently written. It is the opinion of the committee that the intent of the Code will be satisfied provided the following conditions are met:

(1) Chemistry and Mechanical Property Requirements:

(a) The chemistry and tensile requirements shall be as given in ASTM A 351 and shall be established using testing procedures as given in ASTM A 370. The test bars attached to the keel blocks shall be of such dimensions that they shall reflect the greatest casting thickness and there shall be a minimum of three test bars per heat treatment lot and they shall be marked with the heat numbers and other pertinent identification. The test bars shall accompany the castings through all heat treatment.

(2) Finish:

(a) The castings shall meet the requirements of ASTM A 351, paragraph 18. Particular attention is directed to the prohibition against plugging in paragraph 18 (b).

(b) Fittings shall have an interior surface finish of 250 micro-inch rms or 225 micro-inch AA or finer.

(3) Testing:

(a) Pressure Test: Each Fitting shall be given a pressure test and shall show no leaks with the test pressure held for a period of 30 minutes per inch of wall thickness. The test pressure shall be at least 1.5 times the rated pressure of the fitting at room temperature, except that the stress developed at the test pressure shall not exceed 90 percent of the specified minimum yield strength based on the minimum specified wall thickness.

(b) Surface Inspection—Fluid Penetrant: In addition to visual inspection, all surfaces of each fitting shall be inspected by the fluid penetrant method. The following standards of acceptance shall be met:

All linear discontinuities and aligned penetrant indications revealed by the test shall be removed.

Aligned penetrant indications are those in which the average of the center-to-center distances between any one indication and the two adjacent indications in any straight line is less than 3/16 of an inch.

All other discontinuities revealed on the surface need not be removed unless the discontinuities are also revealed by radiography, in which case the pertinent radiographic specification shall apply.

(c) Radiography: Each fitting shall be completely radiographed in accordance with ASTM E 94 and shall meet the requirements of ASTM E 71 for Class 2 quality castings.

(4) Repair of Defects: Defects disclosed by inspection and testing may be repaired by welding under the following conditions:

(a) The defect shall be removed and the surface of the cavity rendered clean.

(b) All basic requirements and optional requirements for repairs of defects and retest shall be in accordance with the applicable paragraphs of ASTM A 351 and shall be mandatory except that reheat treatment following repairs shall be commensurate with the service.

(c) All repair welds shall be examined by the same procedures and to the same standards as the original cast material.

(5) Heat Treatment: Each treatment shall consist of 1950 F minimum metal temperature and shall be cooled in air or liquid medium at a rapid rate.

(6) Records:

(a) Test Reports: Certified test reports shall give the results of the chemical and tensile properties, and shall specifically indicate that each of the other test requirements in this case have been met. In the event that the inspector did not witness the removal and repair welding of any defects, the test report shall contain a statement as to the number, approximate extent, and location of such repairs.

(b) All radiographs of original material and repaired areas shall be kept for a period of three years and shall be available to the inspector at all times.

(7) Retests: If the results of any chemical or mechanical tests do not conform to the requirements, retests must be made in accordance with paragraph 11 of ASTM A 351.

(8) Special Requirements: It shall be the responsibility of the designer to require any or all of the following where service conditions or welding requirements warrant, and when so specified, they become a requirement of this case.

(a) Where gaseous products of nuclear fission are anticipated, mass

MAXIMUM ALLOWABLE STRESS VALUES IN TENSION (psi)

ASTM A351 grade:	CF8	CF8M	CF8C	CH20	CK20
Spec Min Tensile:	70,000	70,000	70,000	70,000	65,000
TEMPERATURE					
—20 to +100	17,500	17,500	17,500	17,500	16,250
200	15,700	16,900	17,000	16,100	15,300
300	14,250	16,500	15,600	15,150	14,900
400	13,100	16,300	14,200	14,600	14,600
500	12,200	15,900	13,000	14,550	14,550
600	11,700	15,350	12,200	14,450	14,450
650	11,500	15,000	11,900	14,400	14,400
700	11,300	14,700	11,700	14,350	14,350
750	11,100	14,350	11,600	14,300	14,300
800	10,900	14,000	11,500	14,150	14,150
850	10,650	13,500	11,350	13,900	13,900
900	10,400	13,000	11,200	13,500	13,500
950	10,100	12,350	11,100	12,500	12,500
1,000	9,850	11,700	11,000	10,500	11,000
1,050	9,600	10,600	10,900	8,500	9,750

NOTE: These stress values are based on a casting quality factor of 1.00.

spectrometer or other gaseous leakage tests shall be specified.

(b) Commensurate with the service,

(I) the chemistry and tensile requirements shall be as given in ASTM A 351. The tensile requirements shall be determined from a sample ring cut from one end of each fitting using the testing procedures as given in ASTM A 370;

(II) the flattening properties shall be established as required by ASTM A 376, paragraph 11.

(9) Allowable Stress Values: Fittings produced in compliance with this case shall be based on allowable stress data as shown in the table.

Photographic Films, Plates and Papers, PH1—

Sponsor: Photographic Standards Board.

Ira B. Current, manager of the Ansco Standards Department, took office recently as vice-chairman of Sectional Committee PH1. Mr Current is also a member of Subcommittee PH1-1 and secretary of PH1-3, and is a member of Sectional Committee PH22 on Motion Pictures.

Ira B. Current

An active amateur photographer himself, Mr Current is editor of the PS & T Supplement of the *Journal* of the Photographic Society of America, and is a member of the Society's techniques and motion picture divisions. He served at the Naval Photographic Science Laboratory, Naval Air Station, Anacostia, D.C., during World War II. A member of the Society of Motion Picture and Television Engineers, the Optical Society of America, the Society of Photographic Scientists and Engineers, and the American Society of Photogrametry, he finds enough time to help bring up four children and to carry out some do-it-yourself machine and woodworking shop projects.

General and Administrative Standards for Nuclear Energy, N2—

Sponsor: Atomic Industrial Forum.

New chairman of this committee is Jerome D. Luntz, editor and publisher of *Nucleonics Magazine*, McGraw-Hill Publishing Company. Mr Luntz is also chairman of the McGraw-Hill Editorial Board, and associate editor for the McGraw-Hill Book Company Nuclear Engineering Series.

Jerome D. Luntz

A founder of the American Nuclear Society, Mr Luntz is a past vice-president of the Society and a past member of the Executive Committee and Board of Directors. He is chairman of the Society's Local Sections and Student Branches Committee and a member of the Professional Divisions Committee and the Honors and Awards Committee. He is also a founder and the first president of the Nuclear Energy Writers Association.

Mr Luntz is past chairman of the Glossary Subcommittee of the Nuclear Standards Board of ASA.

Library Supplies and Equipment, Z85—

Sponsor: American Library Association.

A broad program of user standards for the professional librarian was undertaken at the first meeting of the committee, held in New York, June 3. Three subcommittees were set up to work on library steel bookstacks (Subcommittee 1), library furniture, including wood shelving, wood and metal furniture (Subcommittee 2), and library supplies (Subcommittee 3).

Frazer G. Poole, director of the Library Technology Project, American Library Association, is chairman of the sectional committee and also of Subcommittee 1.

Mr Poole has announced that each of the groups has established specific, initial standardization objectives. His own has set its sights on performance standards for the finishes applied to steel stacks. Producers on the committee will study each other's finish specifications to determine if one national standard can be arrived at to which all parties concerned would be in substantial agreement. Subcommittee 1 also agreed to study the possibility of obtaining dimensional standards to permit interchangeability of stacks and columns.

Subcommittee 2 selected the straight-back wood (nonfolding) chair as the subject for development of dimensional and performance standards. Chairman of this group is E. Sigurd Johnson, professor of furniture manufacturing and management, North Carolina State College.

Subcommittee 3 will go to work on specifications for library catalog cards both as to dimensions and general durability. Chairman is Forrest F. Carhart, Jr, also of the ALA's Library Technology Project.

The campus of North Carolina State College will probably be the site of the next meeting of Mr Johnson's subcommittee, with an unconfirmed date in September. Mr Poole's group will meet again in New York on September 21. No date has been set for the next meeting of Mr Carhart's subcommittee on supplies.

Fifteen national, noncommercial organizations and 19 companies whose products serve the library field were represented at the meeting on June 3. No trade association exists for the manufacturers of library supplies and equipment.

This is the first time an attempt has been made on any scale to obtain standards for library supplies and equipment, Mr Poole has pointed out.

The Z85 project was initiated by ASA on recommendation of a general conference, following a request for such a project from Sectional Committee Z39, Standardization in the Field of Library Work and Documentation, and from the Council of National Library Associations, sponsor for Z39.

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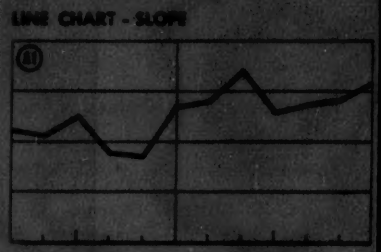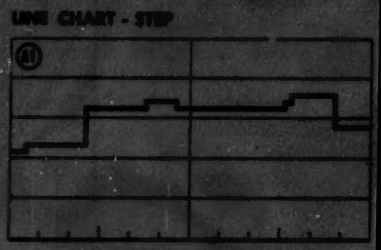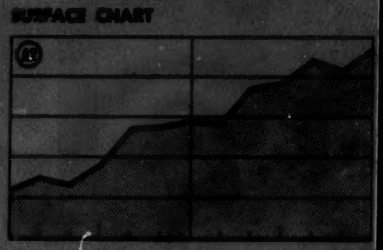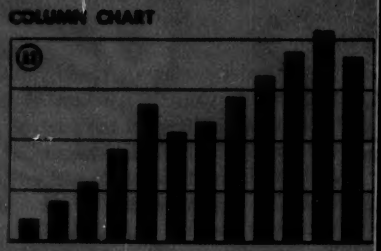
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